OEFoxitReaderEd/>
°aeÈ ÈùÖÐ (O) Foxit Software Company,2005-2006
½ÓÃÛÆÀÂÛ

20 BEST PHOTOSHOP TIPS

# POPULAR Photography

JANUARY 2009

WORLD'S LARGEST IMAGING MAGAZINE

# NIKON CANON

## MASTER 5 YOUR DSLR 'SECRET' CONTROLS

## SUPERZOOM TELEPHOTO HEAVEN

## HOW TO

- GET GREAT ANIMAL PHOTOS
- SHOOT ROCK & ROLL
- LIGHT PORTRAITS RIGHT

## PLUS MEN VS. WOMEN WHO'S THE BETTER SHOOTER?

TAMRON'S 18–270MM STOPS THE SHAKE

## HOT NEW CAMERAS

- CANON EOS 50D: BIG UPGRADE
- OLYMPUS E-30: CREATIVE TOOL
- PANASONIC LUMIX G1: TINY GIANT

# In this family, everyone is photogenic.

The new Sony® α (alpha) DSLR-A900
– the latest addition to the Sony α DSLR family

SONY

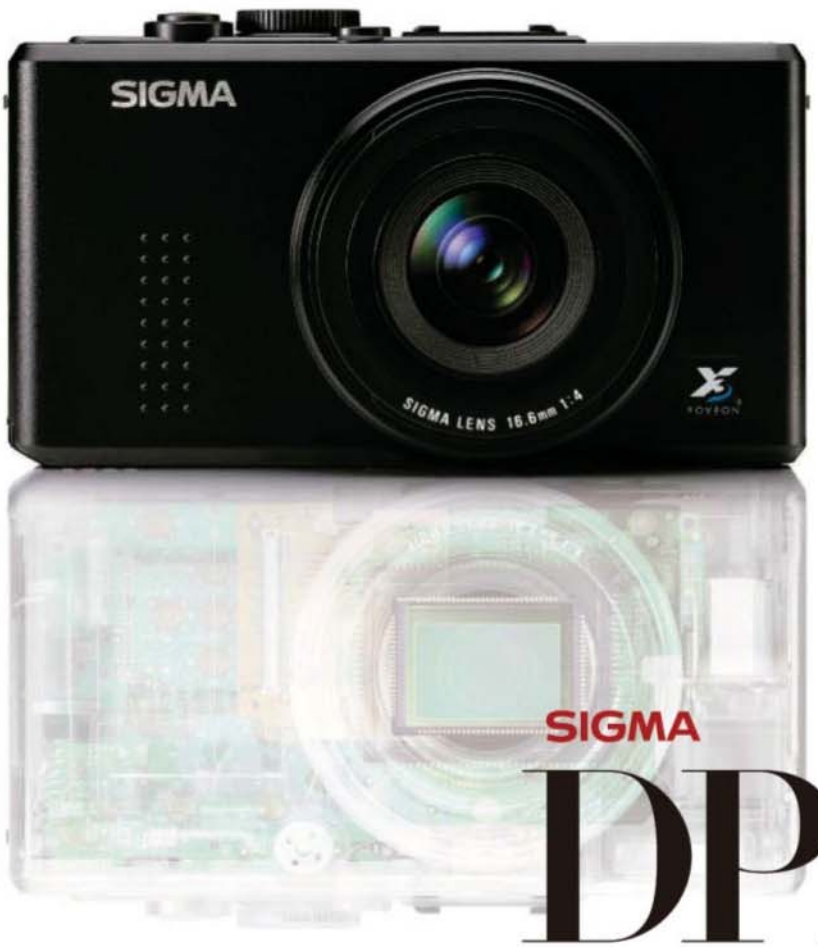
Introducing the new Sony α DSLR-A900, featuring 35mm full frame 24.6 Megapixel CMOS Sensor and SteadyShot® INSIDE in-camera image stabilization, for the highest quality picture. The α900 also features Dual BIONZ® imaging processors for continuous shooting up to 5fps with superb image quality and ultra low noise. Get the big picture at sony.com/alpha

© 2008 Sony Electronics Inc. All rights reserved. Reproduction in part or whole is prohibited without prior written consent of Sony.
Sony, the Sony logo, alpha, α and SteadyShot are trademarks of Sony. Dual BIONZ is a registered trademark.

SIGMA

# A camera for Artists.

It's a high-performance compact digital camera,
designed to deliver hardcore artistic control.
It's going to make you fall in love with photography, all over again.
The Sigma DP1, a camera that belongs to no known category.
The camera no one's made before.




SIGMA

DP1

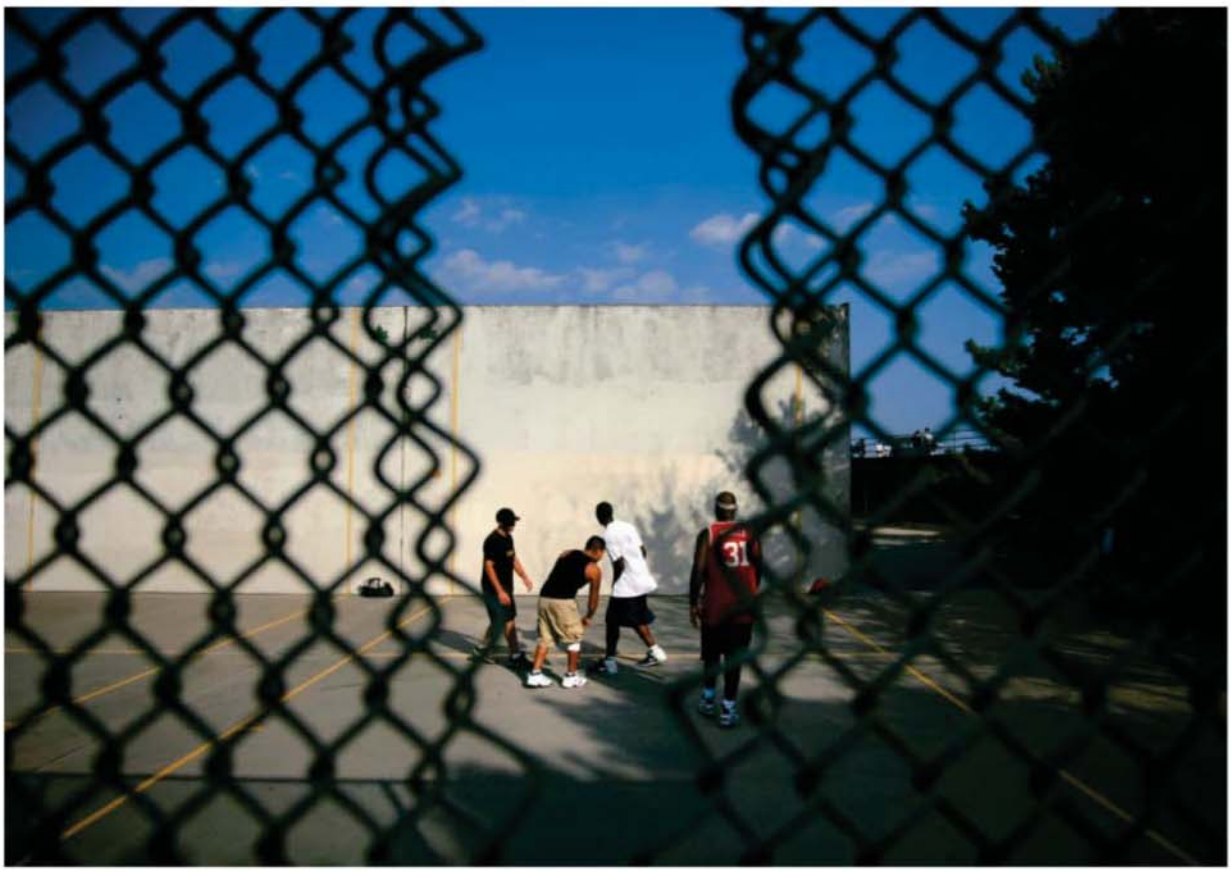
**THE SIGMA DP1**
**A FULL SPEC COMPACT**
**DIGITAL CAMERA WITH ALL**
**THE POWER OF DSLR**

**THE SIGMA DP1. Innovation admired by the world, in your hands.** → **www.SIGMA-DP1.com**

The built-in SLR-sized 14-megapixel image-sensor is 7 to 12 times bigger than that of an ordinary compact digital camera. The Foveon® direct image sensor captures all the RGB data on every pixel. The 16.6mm F4 lens uses large-diameter(14.5mm) aspherical glass molds for superior high-resolution and high-contrast performance. And the brand-new "TRUE" image-processing engine delivers new insight. Measuring just W:113.3mm x H:59.5mm x D:50.3mm and weighing just 250g, the SIGMA DP1 is the world's first and only integral-lens high-performance compact digital camera with SLR specifications. It's designed to deliver pure creative control and ignite your creativity.

**SIGMA CORPORATION OF AMERICA** 15 Fleetwood Court, Ronkonkoma, N.Y.11779, U.S.A. Tel: 1-631-585-1144 www.sigma-photo.com

SIGMA



# OUR WORLD

Liz O. Baylen / Born in 1979, she graduated from Ohio University's School of Visual Communications in 2001 and began working for The Washington Times. She has covered assignments around the world and was selected as a finalist for the Pulitzer Prize while with The Washington Times. Most recently, her images have appeared in several major newspapers. Shooting data: SIGMA 18-125mm F3.8-5.6 DC OS HSM, 1/1600 at f5.6.

**LIZ O. BAYLEN SHOOTS THE WORLD WITH A SIGMA LENS.**

**NEW**

Lens hood (LH-730-02) included. For Sigma, Nikon, Canon, Pentax, and Sony cameras.

In New York's Coney Island, the summer sun dances beyond the fence. As summer begins to fade, a group of young men play handball in a dazzling patch of light. This urban scene was captured by a Sigma lens, a compact, high ratio zoom lens designed exclusively for digital SLR cameras that incorporates Sigma's original OS (Optical Stabilizer) function. The use of SLD (Special Low Dispersion) glass and aspherical lenses produces high image quality throughout the entire zoom range. The super multi-layer coating reduces flare and ghosting. This lens incorporates HSM (Hyper Sonic Motor), which ensures a quiet and high-speed autofocus.

FOR DIGITAL

**A compact, high ratio zoom lens designed exclusively for digital SLR cameras that incorporate Sigma's original Optical Stabilizer function.**

## SIGMA 18-125mm F3.8-5.6 DC OS HSM

SIGMA CORPORATION OF AMERICA
15 Fleetwood Court, Ronkonkoma, NY 11779 • 631-585-1144
In Canada exclusively distributed by Gentec International, Markham, Ontario
Visit us on the Web at www.sigma-photo.com

## Your passion is capturing great moments. So is ours.

When you travel thousands of miles for the perfect shot, you need a memory card you can depend on. Lexar Professional memory cards deliver blazing speed, optimal burst-mode performance, and industry-leading transfer rate speeds. So when your back's against the wall, you can capture every moment. **Lexar. When Memory Matters.**

© 2008. Lexar and the Lexar logo are trademarks of Lexar Media, Inc. All rights reserved. All other trademarks are property of their respective owners. Actual usable memory capacity may vary. 1MB equals 1 million bytes; 1 GB equals 1 billion bytes. Lexar's "x" speed rating describes minimum write speed capability where X=150KB/sec sustained write speed.

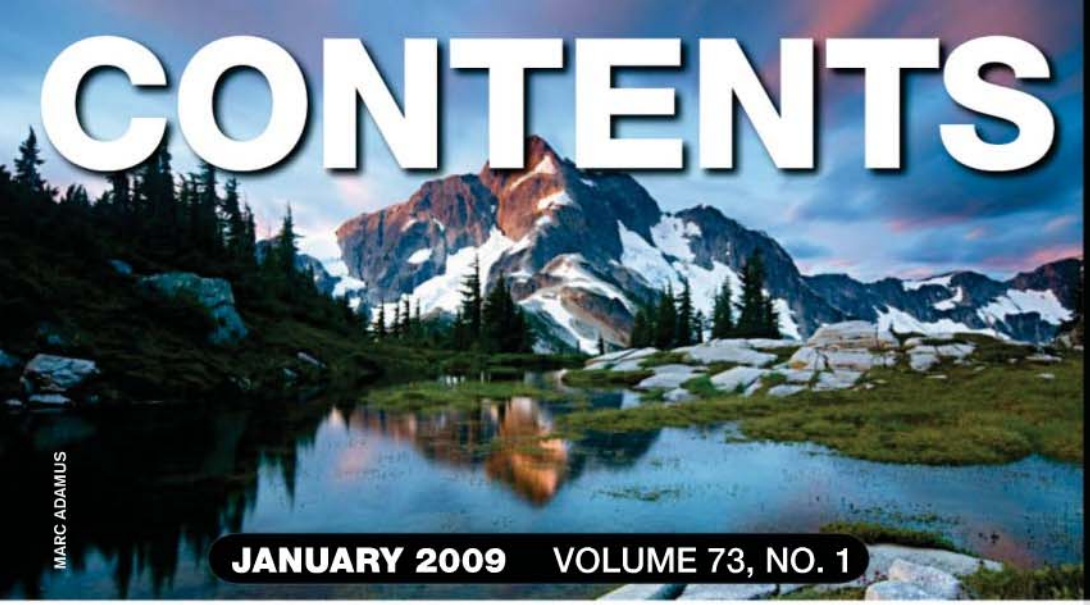
Nick Didlick on location at the Great Wall in Beijing using a Nikon D700 and a Lexar Professional UDMA 300x CompactFlash card.

Lexar™
When Memory Matters

Lexar Professional line cards are available at these and other retailers and at www.lexar.com/pop

Circuit City · BEST BUY · B&H · ADORAMA · Samy's Camera

# CONTENTS



MARC ADAMUS

JANUARY 2009 VOLUME 73, NO. 1

## ON OUR COVER

**NEWSSTANDS:** We test Tamron's new 15X superzoom lens for Canon and Nikon DSLRs on page 100. Photo by Tony Cordoza.

**SUBSCRIBERS:** Learn how to take amazing aquarium photos, like this one from Atlanta's Georgia Aquarium, on page 60. Photo by Bruce Carlson.

## FEATURES

**60 See World** Get incredible undersea photos without getting even your feet wet. *By Peter Kolonia*

**68 5 Secret Weapons Inside Your DSLR** Your camera is more powerful than you think. *By Dan Richards*

**73 The Sex Factor** Men versus women photographers—what's the *real* difference? *By Kerrie Mitchell*

**80 20 Best Photoshop Tips** Secrets of the imaging superstars for faster, better fixes. *By Debbie Grossman*

## HOW-TO

**22 Nature** Shoot perfect portraits of animals, close-up and personal. *By Steven Morello*

**26 Traveling Photographer** Capture the wild beauty of the Florida Everglades. *By Lori Fredrickson*

**36 You Can Do It** Catch the rock & roll vibe at a live show. *By Erik Seo*

**40 Tips From a Pro** Turn spare parts into abstract art. *By Laurence Chen*

**128 Three Ways** Get a better background in your photo. *By Kathleen Davis*

**132 By the Book** Take great shots in tough conditions. Plus: fake a filter. *Compiled by Kathleen Davis*

## COLUMNS/DEPARTMENTS

**13 Editorial** Discover a motherlode of RAW data. *By John Owens*

**14 The Goods** A can-do compact, handy card adapter, and more.

**15 High 5** Security tools for all your gear, from cameras to laptops.

**18 How I Shot This** One pro's vision of the American farmer.

**57 Lighting** How you can light portraits right. *By Peter Kolonia*

**140 Backstory** Peeping through the windows of a skyscraper.

## TESTS/REVIEWS

**84 DSLR Test** Canon EOS 50D: With 15.1MP and a powerful new processor, this is one big upgrade.

**89 Lens Test** Canon 18–200mm f/3.5–5.6 EF-S IS AF.

**90 Camera Test** Panasonic Lumix DMC-G1: The new Micro Four Thirds system spawns a tiny giant.

**96 Lens Test** Panasonic Lumix 14–45mm f/3.5–5.6 G Vario Mega O.I.S.

**98 DSLR Hands On** Olympus E-30: A creative tool for arty shooters.

**100 Lens Test:** Tamron 18–270mm f/3.5–6.3 Di II VC AF.

**101 Which Laptop Should I Buy?** Replace your desktop.

## + PLUS

10.....Letters
30.....The Fix
32.....Picture Doctor
114.....Time Exposure
126.....Cheat Sheet
136.....Tech Support
139.....Speaking of Photography
102.....Classified Advertising

# Web Exclusives

ONLY ON WWW.POPPHOTO.COM

### CAMERA OF THE YEAR

Seven models were nominated, but just one can win. Find out which our Editors deemed "The camera that best refined or redefined photography in 2008." Exclusive video, tests, and one big award—only online.

### WIN A TRIP FOR TWO TO MAUI

Vacation in Paradise. Together with the Maui Visitors Bureau (www.visitmaui.com), we're giving away a trip to this magical destination—to the photographer who best shows us, creatively, how much you want to go. For all of the details and rules for our Magical Maui! How Bad Do You Want It? Photo Contest, visit www.PopPhoto.com.

**41 PROMOTIONAL SECTION**
**15th Annual Readers' Photo Contest** See the best of your best images in six categories—plus a Grand Prize Winner.

WWW.POPPHOTO.COM

**58:** Number of lenses in the legendary NIKKOR family.

**58:** Number of legendary NIKKOR lenses you'll want.

45 million NIKKOR

*Over 45 Million NIKKOR® Lenses Produced.*

For more than 70 years, the NIKKOR family of lenses from Nikon has been recognized for its superb image quality and exacting standards. And it's a tradition of excellence that continues today, with many of our lenses equipped with proprietary ED glass to help limit chromatic aberration. When you consider some of their other remarkable new features (see opposite page), you'll understand why all 58 of our NIKKOR lenses remain in such high demand. Learn more at **nikonusa.com**

Upload, organize and share your pictures online at mypicturetown.com

Nikon

*At the heart of the image*™

Nikon® and NIKKOR® are registered trademarks of Nikon Corporation. ©2008 Nikon Inc.

# POPULAR Photography

| | |
|---|---|
| Senior Vice President / Editor in Chief | **John Owens** |
| Managing Editor | **Miriam Leuchter** |
| Art Director | **Jason Beckstead** |
| Senior Editor | **Peter Kolonia** |
| Senior Editor | **Dan Richards** |
| Senior Editor | **Debbie Grossman** |
| Technical Editor | **Philip Ryan** |
| Technology Manager | **Julia Silber** |
| Assistant Editor | **Lori Fredrickson** |
| Assistant Editor | **Kathleen Davis** |
| Art/Production Assistant | **Linzee Karasik** |

**Contributing Editors** Tim Fitzharris, Russell Hart, Peter Krause, Neal Matthews, Arthur Morris, Tony Nagatomo, Bryan F. Peterson

| | |
|---|---|
| **www.PopPhoto.com** Editor | **Jack Howard** |
| In Memorium | **Herbert Keppler** |

| | |
|---|---|
| Vice President/Publisher | **Jeffrey Roberts** |
| Associate Publisher | **Anthony M. Ruotolo** (212) 767-6397 |
| Business Development Manager | **Phil Mistry** |
| Senior Account Executive | **Sara Schiano Flynn** |
| West Coast Ad Director | **Bob Meth** (323) 954-4836 |
| East Coast Ad Manager | **Peter Romanoff** |
| Account Executive | **Tara Weedfald** |
| Classified Ad Sales | **Chip Parham** (212) 767-5717 |
| Group Billing Director | **Irene Reyes Coles** |
| Group Marketing Director | **Cathy Christino** |
| Senior Promotions Designer | **Erin Friedmann** |
| Senior Promotions Designer | **Lindsay Krist** |
| Director of Special Events | **Michelle Cast** |
| Special Events Producer | **Erica Johnson** |
| Special Events Coordinator | **Vanessa Vazquez** (212) 767-6009 |
| Digital Days Coordinator | **Athos Kyriakides** |
| CheckRated Store Program Manager | **Harold O. Martin** |
| Assistant to the Publisher | **Karen Persaud** |
| Sales Assistant | **Lauren Brewer** |
| Production Director | **Diane Arlotta** |
| Production Manager | **Vicki Feinmel** |
| Production Assistant | **Marjorie Johnson** |
| VP, Finance Director | **William Frank** |
| VP, Consumer Marketing | **Philip Ketonis** |
| Senior Group Circulation Director | **Mirta Soto** |
| VP, Retail Sales and Marketing | **William Michalopoulos** |
| Newsstand Sales Director | **Margaret J. Hamilton** |
| VP, Director of Corp. Marketing | **Al Silvestri** |

Executive VP/Group Publishing Director, Men's Enthusiast Network (M.E.N.)
Integrated Sales and Marketing
**Nicholas J. Matarazzo**

**Advertising Sales Offices**
**Headquarters: Anthony M. Ruotolo** (aruotolo@hfmus.com)1633 Broadway, 43rd Floor, New York, NY 10019; (212) 767-6397. **Los Angeles: Bob Meth** (bmeth@hfmus.com) 5670 Wilshire Blvd., Suite 1600, Los Angeles, CA 90036; (323) 954-4836; Fax: (323) 954-4801. **Detroit: Melissa Homant** (mhomant@hfmus.com) 1585 Eisenhower Place, Ann Arbor, MI 48108; (734) 205-1100; Fax: (734) 971-9188. **Japan: Shigeru Kobayashi** (shig-koby@media-jac.co.jp) Japan Advertising Communications, Inc., Three Star Bldg., 3-10-3 Kanda-Jimbocho, Chiyoda-ku, Tokyo 101, Japan; (011) 81-3-3261-4591; Fax: (011) 81-3-3261-6126.

HFMUS. HACHETTE FILIPACCHI MEDIA U.S. A LAGARDÈRE ACTIVE COMPANY

MPA ABC Popular Photography & Imaging

POPULAR PHOTOGRAPHY IS PUBLISHED BY HACHETTE FILIPACCHI MEDIA U.S. (WWW.HFMUS.COM)
Alain Lemarchand, President and Chief Executive Officer; Philippe Guelton, Executive Vice President and Chief Operating Officer; Catherine R. Flickinger, Executive Vice President and General Counsel; Nicholas J. Matarazzo, Executive Vice President/ Group Publishing Director, Men's Enthusiast Network/Integrated Sales and Marketing; Philippe Perthuis, Senior Vice President, Chief Financial Officer; Tom Donohue, Senior Vice President, Chief Technology Officer; Bennett Theimann, Senior Vice President, Chief Procurement Officer; Thomas Masterson, Senior Vice President, Consumer Marketing & Manufacturing; Todd Anderman, Senior Vice President, Digital Media; Anne Lattimore Janas, Senior Vice President, Corporate Communications; Eileen F. Mullins, Vice President, Human Resources; John Owens, Senior Vice President, Group Editorial Director



COPYRIGHT © 2008, HACHETTE FILIPACCHI MEDIA U.S., INC. PRINTED IN THE UNITED STATES. Popular Photography, Popular Photography & Imaging, Pop Photo, and Modern Photography are registered trademarks of Hachette Filipacchi Media U.S., Inc.



**HFM U.S. IS PART OF LAGARDÈRE ACTIVE, A DIVISION OF LAGARDÈRE SCA (WWW.LAGARDERE.COM)**
Didier Quillot, CEO, Lagardère Active
Jean de Boisdeffre, CEO International of Magazine Division, Lagardère Active

**READER INQUIRIES: We cannot answer reader inquiries by phone, only by mail.** Questions or comments on editorial content should be addressed to Popular Photography, 1633 Broadway, New York, NY 10019; e-mail: PopEditor@hfmus.com. By submitting comments, you agree that they may be edited at our discretion and published in the magazine. We can't guarantee that we will answer all letters. Editorial contributions (texts preferably on disk) must be accompanied by return postage and will be handled with reasonable care; however, publisher assumes no responsibility for return or safety of artwork, photographs, disks, or manuscripts. **SUBSCRIPTION INQUIRIES:** Popular Photography, P.O. Box 54915, Boulder, CO 80322-4915, call (386) 597-4375, or fax (303) 604-7644; allow at least 8 weeks for a change of address to become effective. Include old and new address, enclosing an address label from a recent issue. Subscription prices, U.S.: 1 year, $14.00, 2 years, $28.00; 3 years, $42.00. Canada (includes 5% GST) and other foreign: 1 year, $31.93; 2 years, $55.94; 3 years, $77.94. We accept Visa, MasterCard, and American Express. **BACK ISSUES:** For issues dated within the past 2 years, please send a check or money order for $8.95 ($10.95 from Canada; $15.95 from other countries–add $1.00 for Buying Guides and specials) per copy to: Popular Photography, Back Issues, P.O. Box 50191, Boulder, CO 80322-0191, or call (800) 333-8546. Occasionally we share our information with other reputable companies whose products and services might interest you. If you prefer not to participate in this opportunity, please call (386) 597-4375 and indicate so to the operator. **REPRINTS AND EPRINTS:** For information, please contact Brian Kolb at Wright's Reprints, (877) 652-5295 or bkolb@wrightsreprints.com.



## Decisions, decisions.

The NIKKOR family of lenses from Nikon offers an astonishing range of creative options designed to fit your photographic needs perfectly. These four lenses are a great example:

A 14-24mm f/2.8, that sets a new standard for fast-aperture zoom performance.

A 60mm AF-S Micro, engineered for close-up performance enhanced by Nikon's exclusive, glare-reducing Nano Crystal Coat.

A 16-85mm DX VR, remarkably compact with high-performance zoom and wide-to-portrait versatility.

A 24mm PC-E, with creative tilt, shift, and rotation perspective.

Now, for the tough part: Deciding which one you should get. Learn more about these and other legendary NIKKOR lenses at **nikonusa.com**

Nikon

*At the heart of the image.*

Nikon® and NIKKOR® are registered trademarks of Nikon Corporation. ©2008 Nikon Inc.

© José Carlos Pires Pereira


© José Carlos Pires Pereira


© Nicole S Young


© Juergen Sack


© Robert Churchill

# MENTOR SERIES®

## Worldwide Photo Treks

# JAPAN

## MAY 11 - 19, 2009

Get your camera and your sense of adventure ready: The Mentor Series, along with Nikon professional photographers Joe McNally and Tom Bol, are hosting an unforgettable journey to Japan, a country full of the boisterous and the serene, the kitschy and the traditional, the ultimate urban and the simply rural. No other place juxtaposes more sides of life than Japan and, not surprisingly, few offer more astonishing and once-in-a-lifetime photo ops.

You will arrive first in Tokyo, a city bustling with a palpable energy and sense of purpose. Amid the hustle of seemingly sprinting passers-by, the electric lights flashing in currents and streams, and the quieter scenes speaking of older traditions, freeze moments in time and capture what this remarkable city is all about. On a morning sightseeing tour, visit the Tokyo Tower Observatory and let your lens take in bird's-eye-view perspectives of this unfolding urban expanse. Of course, no visit to Tokyo would be complete without stopping by the Imperial Palace, home to the Emperor of Japan and quite a stunning architectural marvel to behold. The Sensoji (also known as Asakusa Kannon Temple) is another photo hot-spot: a Buddhist temple containing 7th century gates and pagoda buildings, the grounds also contain a shopping street, known as Nakamise Arcade, where many colorful Japanese souvenirs such as kimonos and folding fans are sold.

Next, journey to the natural wonder that has enraptured many an artist, poet and sightseer: Mt. Fuji. Capture in photographs what mere words cannot. This peak, the highest in all of Japan, is an active volcano (don't worry, it hasn't erupted in over 300 years!) with an exceptionally symmetrical cone shape which stands beautifully against the sky, whether on cloudy or clear day. Lake Yamanaka, the largest of the Fuji Five Lakes, offers breathtaking views of some of the natural flora and fauna surrounding the great mountain peak. Traveling on to Hakone, introduce your camera to a whole new viewpoint as you ride on the Mt. Komagatake Ropeway, an aerial lift line which climbs Mt. Komagatake from the shoreline of Lake Ashi. You'll get even more photos of this serene body of water from aboard a Lake Ashi boat cruise, which will take you from one end of the lake to the other, with amazing views of Mt. Fuji and Mt. Hakone along the way.

Kyoto remains the cultural center of Japan, and it is in this dignified city that you'll encounter some of the more picturesque scenes of traditional Japanese life: raked temple gardens, carefully contoured temple roofs and mysterious Shinto shrines. Kinkaku-ji Temple, second only to Mt. Fuji as Japan's most famous site, is renowned for its gold-leafed main building which shimmers tranquilly on the surface of its adjacent pond. Glean this vision in the morning and your portfolio will surely shine. 17th century Nijo Castle, with its palaces, moats and gardens, is another sight your lens will delight in as it takes in all the great history and beauty Kyoto has to offer.

You won't want to miss this photography trek to Japan, a country steeped in rich culture and natural beauty that will leave your eyes and lens completely amazed!

### SCHEDULED TO APPEAR

Limited to 20 Students per Instructor

**JOE MCNALLY**
*Sports Illustrated*
*National Geographic*

**TOM BOL**
*Adventure Cyclist Magazine*
*Explorer Magazine*

### Workshop fee: $4950*

*includes: workshop fee, round trip economy airfare LAX/Tokyo and Osaka/LAX, hotel accommodations (based upon double occupancy), breakfast daily, one lunch and two dinners, one boat cruise, train transfer to Kyoto, government taxes, security fees, fuel surcharges, arrival and departure transfers, in-the-field instruction, presentations, digital reviews, transportation to each shooting location and an Mpix photo book.

**Register Online**
**www.mentorseries.com**

**For more info call Toll Free**
**1.888.676.6468**

**With Additional Support From:**

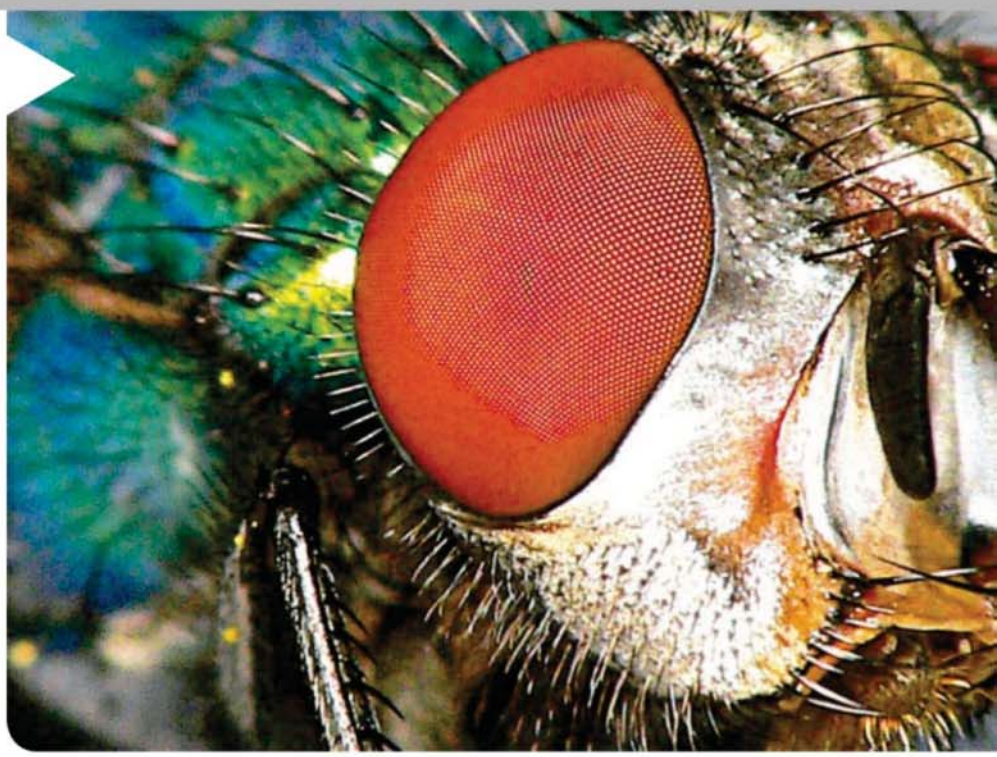
PHOTOSHELTER Mpix

**Special Thanks to our Premier Sponsor:**

Come to Japan and try out some of the latest equipment that Nikon offers including their high-performance digital SLRs, NIKKOR lenses and a variety of Coolpix compact digital cameras. You'll capture Japan as never before!

At the heart of the image™ Nikon™

# EyeON THE FLY



**Macro photography is a lot of fun. Everyday subjects—such as this fly—look very different up close. I've taken many interesting close-ups in my backyard using a three-year–old Panasonic Lumix DMC-FZ20. With the lens racked out to maximum zoom, I snap on a Raynox DCR-250 2.5X Super Macro Lens ($60, street) using a Raynox lens holder ($24, street).**

**I find this much more practical than the usual ultra-close macros. With the Raynox, the maximum magnification occurs with the camera still several inches away from the subject. This way, the subject isn't shaded by the lens, and there's enough room for light to reach it. I can even use the on-camera flash, which I diffuse with a piece of milk-colored plastic.**

**I photographed this fly at ISO 80, exposing 1/60 sec at f/8. I didn't use a tripod—I just leaned against a tree to steady myself.**

**Try it, you'll find that the most ordinary things suddenly become very strange and beautiful.**

***Henk Egbertzen***
***Nijmegen, The Netherlands***

## Zoom and gloom

In Tech Support (October 2008), you said that most Canon EOS cameras require at least f/5.6 to focus. I assume this applies to other brands, too. Looking at zooms that go 300mm or more, most are in the f/4–5.6 range. So if you add a teleconverter and lose a stop of light, they become f/5.6 to 8. No autofocus. You could buy a fast zoom if you're willing to refinance your house. Or—here's an idea—you could focus manually. *John H. Gibbons*
*Calgary, Alberta, Canada*

True. Even those afraid of manual focus should consider teleconverters. After all, subjects typically will be at or near infinity, making the loss of AF inconsequential.

## A lucky thief

My Nikon D80 was stolen, and I'm considering replacing it with a Nikon D90, D300, or D700. I'm an amateur photographer, and with the new cameras' high ISO capabilities and stabilized lenses, I'd be tempted to bid good riddance to my tripod. I also value light weight, since I do a lot of photography in the backcountry. I'd think the full-frame FX-format lenses are heavier than DX lenses for APS-C-sized sensors. What's your take?

*Paul Rosenberger*
*Manhattan Beach, CA*

There might be 100 ways to respond, but based on three words—"amateur" and "light weight"—we say go with the D90. Especially if cost is a factor. Consider that the full-frame D700 with a 24–120mm f/3.5–5.6G ED-IF VR Nikkor lens weighs 3.3 pounds and sells for $3,260. The D90 has a 1.5X lens factor, yet even with an 18–105mm f/3.5–5.6G ED VR Nikkor (27–180mm, full-frame equivalent), it weighs just 2.33 lb. And at $1,235, we'd say, Paul, that this package is (ouch!) a steal.

## Building code

If the owner of a property denies permission to enter it to photograph a structure (such as a barn), what's the legality of photographing it from a public area (such as the shoulder of the road)? *Dave Kaplan*
*Brewster, NY*

Alan Korn, a Berkeley, CA, attorney who specializes in copyright, trademark, and intellectual property, says no laws prevent your taking photos on public property, except perhaps of military installations or similar government sites. If the structure is visible and can be shot from a public road, the owner does not have a reasonable expectation of privacy or claim for trespassing.

But if you plan to publish the photos commercially, it would be prudent to get a location release. And if the structure bears a mural, ad, or other copyrighted or trademarked material, publication may infringe on those rights as well.

**GET IN TOUCH!**
***E-mail us at PopEditor@hfmus.com.***

HENK EGBERTZEN, WWW.WOOPHY.COM/MEMBER/HENKIE/PHOTOS

18mm

15x ZOOM
18-270mm VC

270mm

# The Ultimate All-In-One Zoom: Longest, Steadiest Lens On Earth

## World record Tamron 18-270mm Zoom has incredible 15X wide-to-super-tele coverage plus advanced VC anti-shake!

A triumph of advanced optical engineering, the new Tamron AF18-270mm Di II VC is the first 15X (28-419mm-equivalent) zoom lens for consumer digital SLRs with advanced Vibration Compensation (VC). Its best feature: It will bring your picture - taking to an entirely new level.

**18-270mm** F/3.5-6.3 Di II VC new

Model B003 For Canon and Nikon

Di II Lens designed for exclusive use on digital SLR cameras with smaller-size imagers. VC Vibration Compensation Mechanism

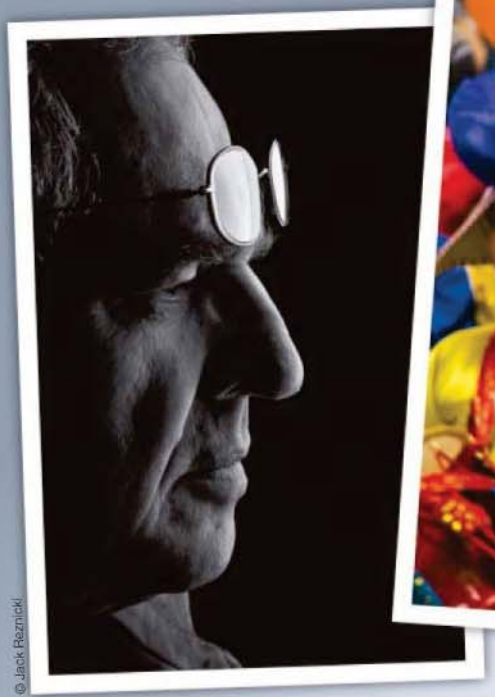
*This lens is not designed for use with 35mm film cameras and digital SLR cameras with image sensors larger than 24 x 16mm.

Tamron USA Inc.
www.tamron.com

Tamron-Manufacturer of precise and sophisticated optical products for a broad range of industries.

TAMRON
New eyes for industry

EPSON®
EXCEED YOUR VISION



**EPSON GIVEAWAY!**
Enter for a chance to win an Epson printer or a Mentor Series® Photo Trek.* Details below.

# Upgrade your prints.

WITH EPSON'S NEW BREAKTHROUGH 13 INCH PIGMENT BASED PRINTERS

## www.popphoto.com/virtualphotolab

Epson has added two exciting new 13 inch wide printers to its award winning line-up with the Epson Stylus® Photo R2880 and R1900 Printers.

**EPSON** R2880
The Epson Stylus Photo R2880 produces exhibition quality prints in both Black & White and Color and incorporates the same inkset that has been extensively used by some of the world's leading professional photographers, all in a 13 inch wide printer.

**EPSON** R1900
The Epson Stylus Photo R1900 sets a new standard, delivering vibrant colors on a stunning glossy surface along with blazing speed and is able to produce prints in mere minutes.

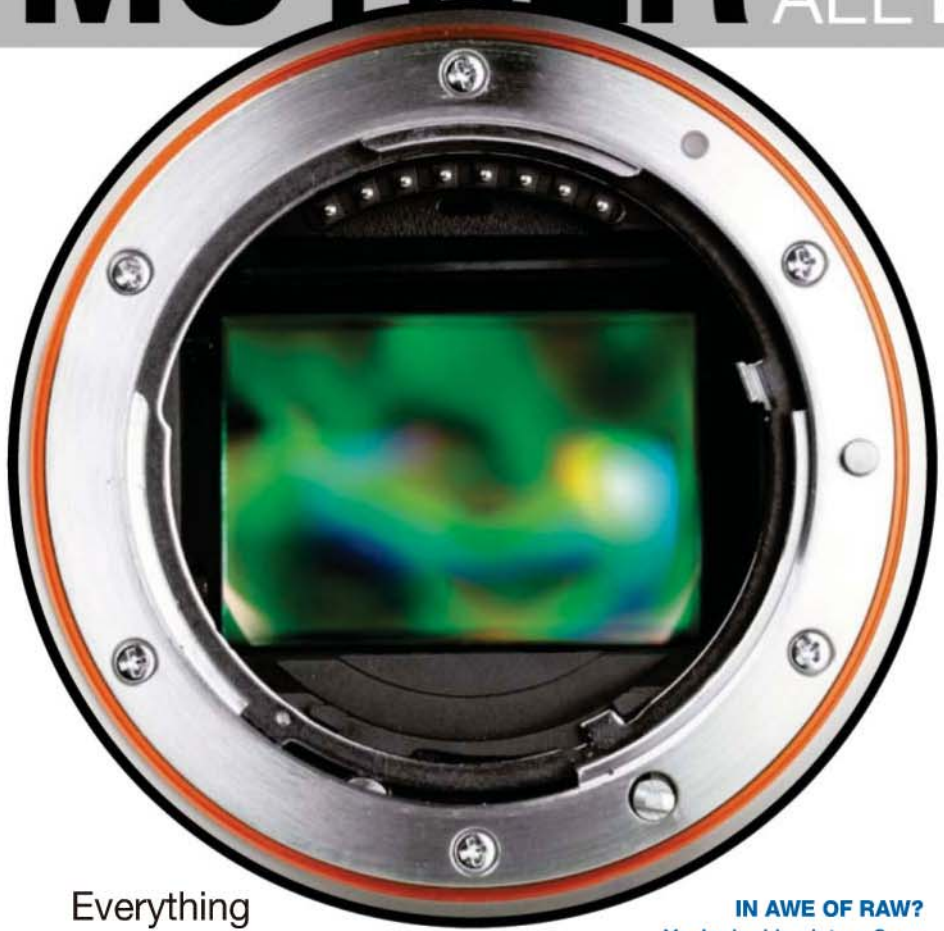
**To learn more about these breakthrough printers check out the Virtual Photo Lab at**
www.popphoto.com/virtualphotolab
and click on the flash animated videos with noted photographer Jack Reznicki.

**Enter for a chance to win an amazing prize!**
You could win an Epson R2880 or R1900 printer, or a 4-day, 3-night domestic Mentor Series® Photo Trek, complete with roundtrip airfare and hotel accommodations!*

*No purchase necessary. Must be legal U.S. resident, 18 or older, to enter and win. Sweepstakes begins on October 10, 2008, and ends on January 31, 2009. Complete sweepstakes details available at http://www.popphoto.com/virtualphotolab. Void where prohibited. Sponsored by Epson America, Inc. and Hachette Filipacchi Media U.S. Inc. Epson and Epson Stylus are registered trademarks and Epson Exceed Your Vision is a registered logomark of Seiko Epson Corporation. All other product and brand names are trademarks and/or registered trademarks of their respective companies. Epson disclaims any and all rights in those marks. Copyright 2008 Epson America, Inc.

By John Owens

# MOTHER OF ALL Data



## Everything you need to know...and then some

**IN AWE OF RAW?** You're looking into a Sony Alpha 900. Want a deep look into how we judge camera specs? Read on.

**Despite our geeky white** coats, clipboards, and computer-generated reports, the crew in the Pop Photo Lab is a bunch of real-world photographers. We're all about handling, usability, and the practicalities of in-the-field and in-the-studio shooting.

But we know that everything photographic starts with a solid grounding in the technical aspects of the camera, lens, and other equipment. You can't expect any product to perform beyond the capabilities engineered into it. And that's where we come in—finding out precisely what those capabilities are. Forget hype. We're talking the kind of objective assessments that have made the Pop Photo Lab and our Certified Test Results the standard of the industry.

For DSLRs, that means we evaluate resolution, noise, color accuracy, and more. In keeping with our real-world mission, when we test a DSLR we shoot in RAW and evaluate in TIFF.

This means we take the data from the camera and run it through the RAW conversion software that came in the box, applying the manufacturer's standard noise reduction, sharpening, and such. Once converted, the file can begin its life as an image—to be printed, edited, or whatever. It's still a huge file, loaded with data that represents the true capabilities of the camera. Which is, obviously, very useful information when you're shopping.

Would we get different data if we used different software to convert the RAW file? Yes, somewhat. But which software to use, if not the one recommended by the camera maker? There are so many RAW converters to choose from. And would the differences tell you anything significant? Usually not. But as an academic exercise it might be interesting.

The same could be said for evaluating the unconverted RAW data.

It's with this sense of curiosity that I click around www.dxomark.com. Essentially a database of info on RAW files from dozens of cameras, this website gives you a reading of a DSLR's intrinsic capabilities. In other words, it evaluates data straight from the imaging sensor. ISO sensitivity, dynamic range, tonal range, color sensitivity—it's all there, as well as other readings, graphs, tables, comparisons, and various wonderfully techie whiz-bang.

And unlike much of what you see on the web, you can take this information seriously. It comes from France's DxO Labs (www.dxo.com), which supplies sophisticated testing software to the optical industry. In fact, DxO's Analyzer is an integral part of Pop Photo's testing suite, and we swear by it.

We have such faith in DxO's good science that in the months ahead, when you look up a camera test on www.PopPhoto.com, you'll also find a link to www.dxomark.com. This way, you can get our hands-on evaluations of both the camera and the converted RAW file, along with DxO's straight-from-the-sensor data.

Interesting, and an absolute gold mine of lab-coat-worthy geekdom. But what makes DxO do this? Altruism? To advance scientific research? Bolstering its brand? A money-making plan?

Credit some of each.

After all, the company sells a software product called DxO Optics Pro Version 5.3. It is—as you might have guessed—one heck of a RAW converter.

OUR EDITORS' PICKS

## Great Expectations

$379, street ■ www.ricoh.com

Photographers have come to expect more than just the ability to point and shoot from Ricoh compacts. The R10 delivers not only 10 megapixels, but an impressive 28–200mm f/3.5–5.2 7.1X optical zoom. "My Settings" mode lets you program what you use most. **HOT:** On-screen electronic level makes sure your images aren't tilted. In-camera editing lets you crop, color-correct, and flag images using the Fn button. **NOT:** No optical or electronic viewfinder, just the 3-inch LCD.

## Totally Adaptable

$30, estimated street

■ www.delkin.com

If you have a bunch of SD cards (and chances are you do), there's no reason to scrap them all just because your new DSLR takes only CF cards. Delkin Devices' Secure Digital to CompactFlash Adapter makes it so you can switch quickly among devices that take different types of cards. **HOT:** Keeping all your work on one card, no matter what camera or reader you use. **NOT:** You don't really need it if you don't switch card types—but you knew that already.

## Easy Access

$150, estimated street ■ www.tamrac.com

Comfortably carrying your gear is essential, accessing it quickly is even better, and doing both is ideal. With the Aero Speed Pack 85, an upgrade of its popular Aero 80, Tamrac holds fast to that promise. **HOT:** Accommodates a DSLR with lens attached, plus two or three other lenses, and plenty of accessories, as well as a 17-inch laptop. Get to your equipment through side, front, or top compartments that are secured with water-resistant zippers. **NOT:** No tripod holder.

HOW-TO

**Print without ink with** Polaroid's pocket-sized PoGO. It makes wireless ink-free prints from cell phones and PictBridge digital cameras. The instant-film camera may be dead, but tangible gratification doesn't have to be delayed. ($95, street; www.polaroid.com/pogo/us)

**Stop overpacking** with Balanzza's Ergo handheld digital luggage scale. If your gear weighs a lot, save yourself extra baggage fees. ($25, direct; www.balanzza.com)

**Wear your camera** more comfortably, and keep it out of your way, with the Rapid RS-1 R-strap. It sits across your body so your camera rests on your hip. ($44, direct; www.blackrapid.com)

**Forego the frame with** Metal Mural. You can have your images printed on 6, 9, or 12-inch metal squares, either on a single panel or as a mosaic. ($25–$625, direct; www.metalmural.com)

**Be eco-chic with** Lowepro's Terraclime series camera pouches and small SLR bags. They're fashionable and made from 95-percent recycled materials. ($20–$80, direct; www.lowepro.com)

# Lumix® cameras with wide-angle lenses.

## Because there's no such thing as reverse cropping.

### Wide-angle lenses on Lumix® cameras keep more of nature's beauty in frame.

Whether capturing wide landscapes or just making sure that everyone gets in the picture, only a wide-angle lens will do the trick. Let a Panasonic Lumix wide-angle camera broaden your horizons with LEICA DC™ lenses as wide as 25mm. Be it a high zoom or compact model, Lumix cameras make taking pictures while traveling a snap. Because we think everyone deserves to get the most out of their shots.

For more information on Panasonic Lumix cameras, go to **panasonic.com/lumix**

**Panasonic** ideas for life®

Panasonic LUMIX® DIGITAL CAMERAS

Leica is a registered trademark of Leica Microsystems IR GmbH.

## 1. Camera Armor ToughStrap & SafeGrip Set $27, street ■ cameraarmor.us

From the folks who make elastomeric silicon camera armor, polycarbonate LCD shields, and other high-tech camera protectors, the ToughStrap Shoulder Strap is a simple but elegant solution to slash-and-grab camera larceny. The strap conceals an embedded stainless steel wire that resists cutting and breaking. It will withstand the strongest tug (up to 3,000 pounds!) before snapping. Its companion, the SafeGrip Hand Strap, can be used in tandem or alone, locking the camera in your hand snugly and securely.

## 2. Computrace LoJack for Laptops

$40, direct ■ www.lojackforlaptops.com

Installing Computrace LoJack for Laptops increases your chances of recovering your computer if it is stolen or misplaced. Because part of the system must be installed in your laptop when it's manufactured, it will not work with every model, but it is compatible with many popular PC brands, including Dell, Hewlett-Packard, and Toshiba, as well as with Apple MacBooks. When you report your computer missing, the theft-recovery system alerts Computrace LoJack's recovery team to its location. The $60 Premium edition of the system also deletes your sensitive data before it can be misused.

## 3. Master Lock TSA-approved locks

$7–$12, street ■ www.masterlock.com

Checking your equipment case on a flight? Locking it is a big no-no—unless the lock has been approved by the federal Transportation Security Administration. Master Lock offers several models of combination and key locks that allow TSA screeners, but not baggage handlers, to inspect and relock luggage without damaging the mechanism. A "red alert" indicator appears when the lock has been opened by a TSA screener.

## 4. Think Tank Airport International V2.0 camera suitcase

$329, street ■ www.thinktankphoto.com

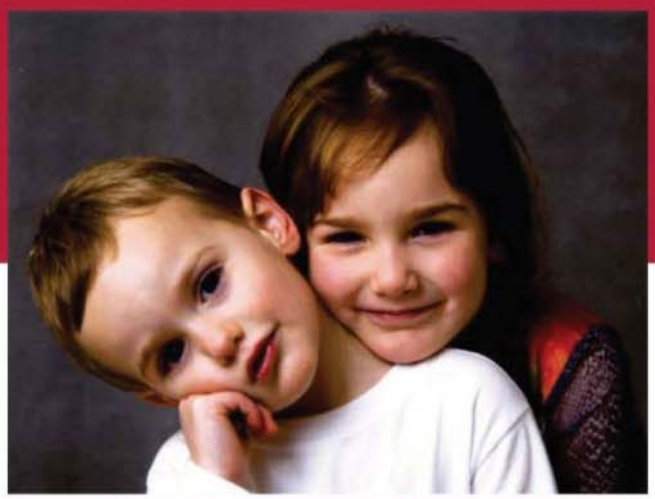
Delayed flights, lack of legroom, and countless other hassles can make flying far from fun. At least this Think Tank bag will ease some of your travel headaches. The international carry-on-sized suitcase has TSA-approved locks (in case you have to check it), a cable to secure it to a fixed object, and space and dividers for several lenses and camera bodies. An optional laptop case and alternate divider set costs $50, street.

## 5. Zoombak A-GPS Universal Locator

$168, street, plus $15/month service fee ■ www.zoombak.com

Gear gone missing? Using Assisted-GPS and cellular technology, the Zoombak tracks its own whereabouts and reports its location to you for up to five days on a single battery charge. Roughly the size of a bar of hotel soap and weighing about 2.5 ounces, it easily tucks into an empty pocket of your camera bag without being noticed. The included easy-to-use software pinpoints its position on a map-like interface. You can set up "safety zones" so that it warns you when it strays outside certain boundaries, and you can even follow the action on your mobile phone. —*Jon Sienkiewicz*

# This Year, Follow Your Dream of Photography



"The NYIP Course in Professional Photography has been the single best investment I have made in my photography career!"

Grant J., Michigan
2007 NYI Photography Graduate

**Portrait by NYI Graduate Fred Kurtz**

***NYI Graduate Fred Kurtz made this arresting portrait of the kids next door using a digital SLR, just one flood light bounced into an umbrella, and a reflector card in his home studio.*** *Fred applied the basic lighting and posing techniques he learned in Unit 4 of the NYI Professional Course. As Fred wrote us, "I gave their mother a print of this and she cried. She ordered prints for Christmas presents and two people at work want me to photograph their families after seeing this."*

"**Thank you for this Course! It was the best course in photography I have ever taken.** *The Course not only made my photos better, but gave me new perspective on the world around me.*"

Marek P., Canada
2008 NYI Photography Graduate

"*I have always had trouble understanding how to make a good portrait.* **Your course has given me the understanding and the confidence to take on the challenge!**"

Floyd B., Texas
2008 NYI Photography Graduate

## Join NYI and Study at Home with the Professionals at America's Oldest Photography School.

Part of the power of photography is that the line between the professional and the amateur is easily crossed. Both groups can take great photographs. That why *NYI's Complete Course in Professional Photography* contains information not only on the techniques and technical matters of photography as well as the artistic and creative aspects, but also contains six invaluable lessons on the business of photography.

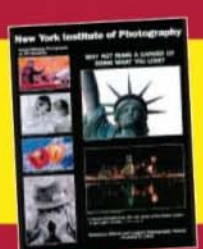
**As you pursue photography, people often ask if you could take on a small job, or sell one of your photographs.** You have to know what to say, and we'll teach you everything you need to know.

Our unique, study-at-home multimedia courses have trained thousands of photographers. We promise that after you complete just the first lessons of NYI's renowned multi-media home training course, you'll be taking better photographs.

**To find out more about NYI's programs and enjoy lots of free photo tips, visit www.nyip.com**

# New York Institute of Photography

America's Oldest and Largest Photography School • Educating Photographers Since 1910




## Free Course Catalog.
## Visit Us Online www.nyip.com/pop

Or Call Us Toll-Free at 1.800.350.8320 (U.S. & Canada)

# HAY Hotshot

## A PHOTOGRAPHER'S VISION OF THE AMERICAN FARMER

**It was love of rock-and-roll** that got Paul Mobley excited about photography. As a teenager in Detroit, a friend got him such great seats to shows that he thought it was ridiculous not to try to take pictures. He went for a degree in photography at Detroit's College for Creative Studies, then, more interested in shooting fashion than cars,



PHOTOS BY PAUL MOBLEY; INTERVIEW BY DEBBIE GROSSMAN

**THE OUTTAKES:** Animals and light make all the difference. Without the cat **(A)**, this shot's just okay. The addition of a furry friend **(B)** helped. But using only reflected light in these photos meant Mobley lost the sky and the saturation he wanted, so he added flash.

he left the Motor City for New York. After a successful (and stressful) career in fashion and advertising, the 46-year-old discovered his favorite subject. See more of his work at www.paulmobleystudio.com.

## Q. What are we looking at?

**A.** His name is Dave Harris and he's from Crane, Montana. This photo is in my new book, *American Farmer* (Welcome Books). Of all the farmers I photographed, he was the one most willing to try anything.

## Q. How did you get the animals to pose?

**A.** While he was sitting there, this cat ran into the picture. Shot number two was better with the cat, but I added a lot of fill light to brighten the picture. I thought, this is pretty good, but I still didn't love the light. When I was adjusting it, in walks this big dog. I said, "Dave, don't move—let's let the animals do their thing."

I kept shooting, and eventually the animals did what I wanted. The animals add such a human element to a big grizzly guy. I never like to call them lucky shots, but sometimes you get lucky with animals. The cat would have been enough, but the dog came in. Would it be as good with the lighting but without the animals? Heck no.

## Q. What gear did you use?

**A.** Off to my left, I used a California Sunbounce reflector in a shiny silver finish, with a portable, battery-powered Lumedyne 200-watt-second strobe fired into the center of it. Since I'm giving away all my secrets, I'll tell you this: Whenever I'm on location, I take a white sheet and set it in front of me—that's right in front of his feet. It helps reflect the sky into his face and cleans the picture up.

## Q. Was the strobe really necessary?

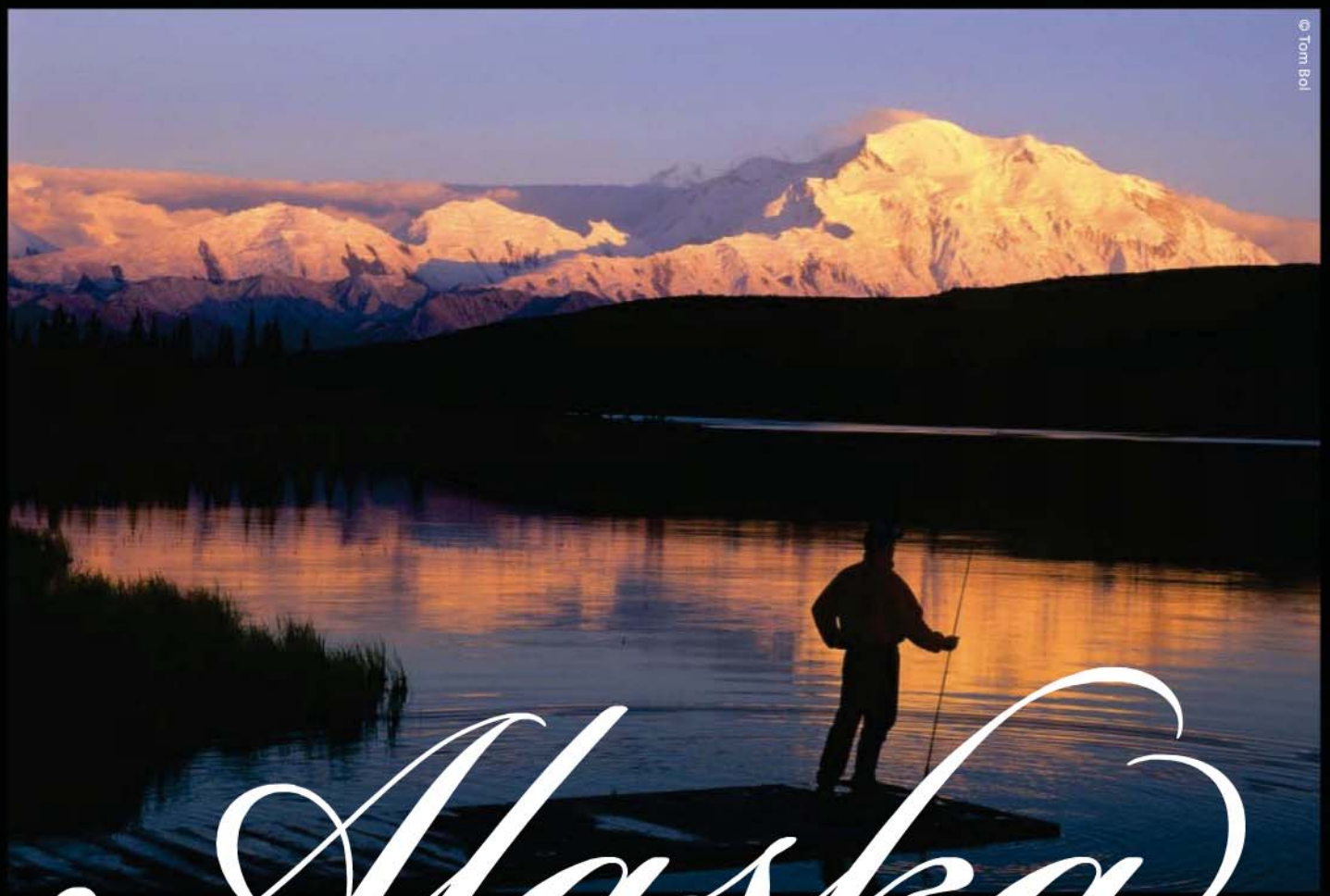
**A.** I could have shot the photograph with natural light. But for my look, I like crisp, vibrant color and saturation—that day, I wasn't going to get it without flash. By making the flash your primary light source, you can control the sky. Because the flash was stronger than the ambient light, the sky went blue.

## Q. What camera did you shoot with?

**A.** This is a Canon EOS 5D with a 24–105mm f/4 Canon EF-IS lens, set at about 24mm.

I shot this image in RAW, which I always do. I normally go in and sharpen the picture a little, and saturate the color to what I think is believable. When it goes too far, I pull back. I'll burn the corners down a little bit, but I still try to keep the mindset of the darkroom.

This project really taught me to find the love in my subject and not be so concerned about the technical. I've missed too many photos in my lifetime by worrying about the light.




# Alaska

## July 11 – 18, 2009

The Mentor Series is headed north to Alaska, a land of majestic mountains, sparkling glaciers and incredible wildlife to wow your senses and expand your portfolio. Traverse the vast grandeur of this state alongside professional photographers Layne Kennedy and Bill Durrence who will guide you in finding the best shots and using the best techniques possible to capture this remarkable locale.

Your trek begins in Fairbanks, Alaska's second largest city located in the heart of the state's interior. Follow the log-cabin-lined city streets and discover the colorful, hospitable locals who add warmth to the chilly air. Travel on next to nearby Denali National Park, an expansive subarctic wilderness with Mount McKinley as its centerpiece. This peak is the highest in all of North America—an overwhelming sight to behold and one you'll be anxious to fill your frame with. Soaring to an astounding 20,320 feet (nearly 4 miles high), Mount McKinley truly embodies what landscape photographers' dreams are made of, and you'll have ample time to photograph this natural wonder and its surrounding Kantishna region.

No place provides a better mixture of Alaska's modernity and its natural beauty than Anchorage, its largest city. Encircled by six mountain ranges and kept seasonable by a maritime climate, Anchorage is active year-round with festivals, recreation and adventure—your camera will always have something lively to zero in on in this urban landscape. Kenai Fjords National Park is another sight you won't want to miss. Here your lens will encounter awe-inspiring glaciers and fjords as well as an array of wildlife. The marquee attraction of the Park may be Exit Glacier, a 3-mile expanse of undulating ice which will offer a host of fantastic photo ops, whether serving as the backdrop to a landscape or the intimate subject of a close-up shot. Journey on to the city of Seward and visit Alaska's only public aquarium and "window to the sea", the Sea Life Center, where a medley of marine life awaits your discerning lens.

Alaska is a place of distinct beauty with photo ops around every glacier and forest bend. Don't miss your chance to explore this unique state with expert photographers at your side—sign up today for a photo trek you won't soon forget!

# MENTOR SERIES®

## Worldwide Photo Treks

**SCHEDULED TO APPEAR**
Limited to 20 Students per Instructor

**LAYNE KENNEDY**
*Smithsonian*
*National Geographic*

**BILL DURRENCE**
*Nikon School*
*Nikon World*

**With Additional Support From:**

PHOTOSHELTER

Mpix

Workshop fee: **$3925***

* includes: hotel accommodations, two breakfasts, two lunches, two dinners, Denali National Park fees, two glacier tours, entrance to the SeaLife Center, in-the-field instruction, presentations, digital reviews, transportation to each shooting location and an Mpix photo book.

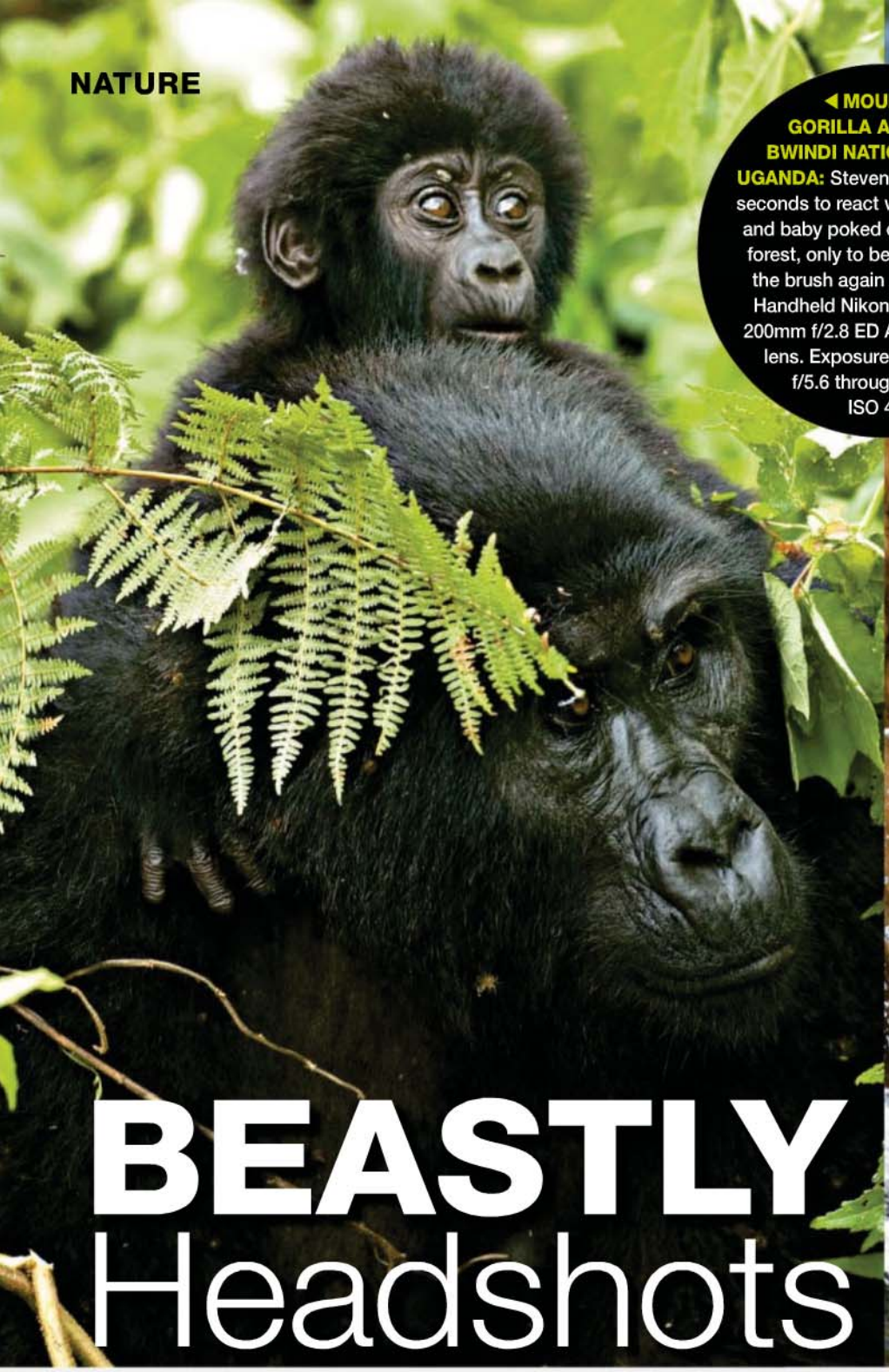
**Register Online**
**www.mentorseries.com**

**For more info call Toll Free**
**1.888.676.6468**

**Special Thanks to our Premier Sponsor:**

Come to Alaska and try out some of the latest equipment that **Nikon** offers including their high-performance digital SLRs, NIKKOR lenses and a variety of Coolpix compact digital cameras. You'll capture Alaska as never before!

*At the heart of the image™* Nikon®



◀ **MOUNTAIN GORILLA AND BABY, BWINDI NATIONAL PARK, UGANDA:** Steven Morello had just seconds to react when this mother and baby poked out of the dense forest, only to be hidden back in the brush again moments later. Handheld Nikon D200 with 80–200mm f/2.8 ED AF Zoom-Nikkor lens. Exposure, 1/180 sec at f/5.6 through UV filter, ISO 400.

# BEASTLY Headshots

**Capturing wildlife headshots**—tight close-up portraits—may seem easy at first glance: Just get as close as possible with a big telephoto lens and take the picture.

That certainly works, if all you're hoping for is a simple snapshot. But to ensure that you get a powerful and inspiring image, a little more effort is involved.

Here are six essential tips to help you get an image with more impact.

## Know your subject—and your gear

Before you set out to photograph wildlife anywhere, whether simply in a nearby park or on a major photo trek abroad, using your camera should be second nature. Know how to change settings without having to stop and look—this can make the difference between an image captured and an image lost.

The photo of mountain gorillas (above) is a case in point. These animals live high in the mountains in Uganda's impenetrable forest. Getting to them often requires a long and difficult trek in very

and photos by Steven Morello

**Close-up portraits of animals take more than a long lens**

hot, humid, and sometimes rainy conditions. Once you find the gorillas, you'll have only one hour to spend with them. These primates move about as they wish, in and out of the dense bush, under constantly changing light. So, to photograph them, you need to travel as light as possible, and to be able to work fast in difficult conditions.

## Find the right light

Photographically speaking, there is nothing better than good light, and the best is at sunrise and sunset. When the sun is low on the horizon, it creates long shadows, brings out texture, and casts a warm glow.

Of course, when you're dealing with wildlife, you can't always predict when your subjects will show up. When lighting is not optimal, I often use fill flash to bring up shadow detail or add catchlights to an animal's eyes. Note, though, that the use of flash is prohibited in some national parks—and even if it isn't, it may unduly disturb animals. Check the local regulations, and always use discretion.

## Choose the right lens

Tight headshots mean long telephoto lenses. If you are photographing in a zoo or in a place where wildlife is close and tolerant (like the Galapagos Islands), a 300mm lens is often sufficient.

For most situations, however, a 500mm lens or longer is the standard. The long lens will isolate your subject and let you focus in on the expression of the animal.

Also get the fastest lens you can afford, so that you can work in low light or less then ideal conditions. Teleconverters are an inexpensive way to increase the focal length of your lens, but these will also dim your image—you lose a stop of light with a 1.4X converter, and 2 stops with a 2X.

Digital SLRs with sensors that are smaller than full-frame provide a real plus for wildlife photographers. With their lens factors, these cameras add to the focal length of your lens by essentially cropping the image recorded on the sensor. For instance, my 500mm f/4 lens becomes the equivalent of a 750mm f/4 when it's mounted on my Nikon D300, with its 1.5X lens factor.

This combination of reach and speed was critical for photographing the walrus in Spitsbergen (on the next page). Because of high winds and low light, I had to shoot at f/4 to get as fast a shutter speed as possible. With a 500mm lens, I had very little depth of field, so focusing precisely on the eye was critical. That's why I make about 80 percent of my images in manual focus.

For exposure, though, I always keep my cameras on aperture priority. Whenever possible I like to control my depth of field, which is especially important when using long lenses for animal portraits. As magnification increases, depth of field decreases, given the same aperture. This helps in blurring out a distracting background in an animal headshot, but you don't want a depth of field so shallow that you lose important detail in the animal's face. If your camera has a depth-of-field preview, use it—and pay attention to your focus point.

◀ **BROWN BEAR, BROOKS FALLS, KATMAI NATIONAL PARK, AK:** You can tell Morello was photographing for the magazine market—he waited to get the bear, fish, and river all in one image. Nikon D200 with a 500mm f/4D ED-IF AF-S Nikkor lens on a tripod. Exposure, f/8 at 1/250 sec, ISO 200.

## Check the histogram

For me, the biggest advantage of digital photography is the ability to check your exposure in the field. This does *not* mean chimping the camera's LCD monitor. Even with high-end cameras, small nuances of exposure are lost on the screens, and they are hard to see in direct light. Instead, use the histogram.

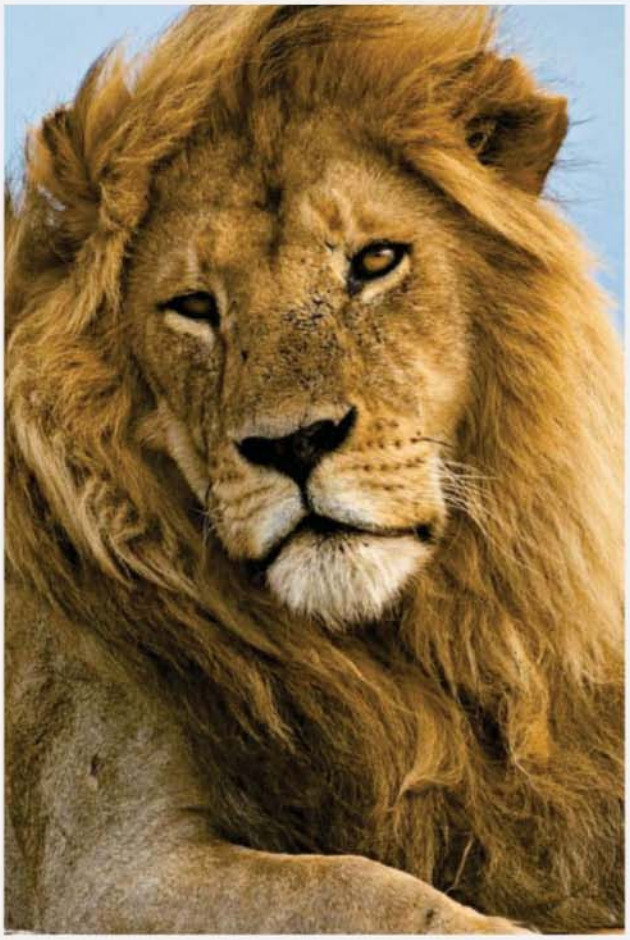
Reading a histogram is easy—it's all about the ends of the scale, not those peaks and valleys in the middle. Don't cut off the end of the scale on either the left or the right.

If you cut off the left-hand side of the scale, you'll have an underexposed image, with no detail in the shadows. In this case increase your exposure until the scale appears more centered.

If you cut off the right-hand side, your image will be overexposed, with washed-out highlights. To compensate, decrease your exposure.

The image of a lion on the Serengeti in Tanzania (on the next page) is informative. You would think that the lion's face was as close to neutral gray as you could get. But after checking my histogram, I saw that it was too far to the left and that I was losing shadow detail. I

**WALRUS, SPITSBERGEN, NORWAY:** When walrus haul out on top of each other, it's hard to tell where one ends and the others begin. Morello used a supertele to isolate individuals from the group. Tripod-mounted Nikon D300 with 500mm f/4D ED-IF AF-S Nikkor lens. Exposure, 1/60 sec at f/4, ISO 200.



**MALE LION, SERENGETI NATIONAL PARK, TANZANIA:** After checking the histogram, Morello decided to increase the exposure by +0.3 EV, which opened up the lion's face. Nikon D200 with 500mm f/4D ED-IF AF-S Nikkor lens on a beanbag atop a safari vehicle. Exposure, 1/90 sec at f/8, ISO 200.

compensated by +0.3 EV and got the proper exposure.

## Sweat the details

Get close for a reason—highlight the details that might otherwise be lost in a wider shot. The image of the bear (previous page) at Brooks Falls, AK, is a case in point. The salmon in its mouth was moving back and forth—sometimes pointing backwards, and sometimes forwards.

I waited to release the shutter at the moment it was nearly perpendicular to the bear's head, so you could see the fish as well as the bear. I don't believe in holding my finger on the shutter release and letting the camera fire away in a burst, hoping for a good shot.

Brooks River combines dark water with white water, making for a tricky exposure. In such cases, an image may require fine-tuning in an image-editing program after the shoot.

For this reason, I always shoot in RAW and not JPEG. With JPEGs, your camera makes adjustments to your image and then compresses the file. Sure, this saves space on your memory card, but you lose some of the original image information. This limits the adjustments you can make in postprocessing. While shooting RAW gives you a much bigger image file, you have much more leeway for adjustments later.

## Add life

One of the biggest obstacles in wildlife photography is bringing life to a still image—it's especially challenging when you are making a tight headshot. It's the small things that show life in your subject—the catchlight in the eye, the forward cocking of the ears, even little drops of drool on the chin.

Once, when I was photographing a hyena, it was watching for an opportunity to feed on a carcass of a lion kill. It focused on the kill and not on me—doing what this animal normally does in the wild, not what it does when a person is interfering.

*Steven Morello's work has appeared in* National Geographic *magazine and books, as well as* The New York Times. *His recent book,* The Traveling Nature Photographer: A Guide for Exploring the Natural World Through Photography, *is available in paperback from Schiffer Publishing. Check out his photo tours at www.greenplanetexpeditions.com.*

THE WORLD'S FASTEST AUTOFOCUS, SO IT'S

# FULLTHROTTLEPROOF

Zuiko Digital ED 50-200mm f2.8-3.5 SWD Lens. ©2008 Olympus Corporation

**"I'M ALWAYS LOOKING TO PUSH THE LIMITS OF PHOTOGRAPHY. SO IS MY E-3."** -JAY KINGHORN, OLYMPUS VISIONARY

The Olympus E-3 allows Jay Kinghorn, Olympus Visionary, to go all out. It combines the world's fastest autofocus* with Zuiko™ Digital Lenses to give ultimate image quality and edge-to-edge sharpness even at wide open apertures—so an f/2 lens is always tack-sharp at f/2. And the E-3 has Superior In-body Image Stabilization with up to 5-stops of shutter speed compensation, so no matter which lens Jay uses—from super telephoto to ultra-wide-angle—his images are blur free and sharp. Magnesium-alloy construction makes the E-3 lightweight yet extremely durable. The E-System's body and lenses are sealed, so they're dustproof and splashproof. Jay Kinghorn's photos are proof that with the Olympus E-System, brilliant technology equals brilliant imagery. getolympus.com/e3

50-200mm SWD Lens Shutter Speed 1/1000 sec Aperture: F/5 ISO 100

*Capture It All®*

OLYMPUS®

**DELKIN DEVICES**
Making Photography Better
Find Our Products
At Any Of These Fine Retailers

| Store | City | State | Phone/Web |
|---|---|---|---|
| SCRAPBOOK, EH! | CALGARY | AB | scrapbookeh.com |
| ART SUTCH PHOTOGRAPHY | JUNEAU | AK | divealaska.com |
| CAMERAGRAPHICS, INC. | AUBURN | AL | cameragraphics.net |
| ROLLIES CAMERA | SEDONA | AZ | rolliescamera.com |
| JONES PHOTO, INC | TUCSON | AZ | jonesphoto.com |
| PHARMASAVE | SALMON ARM | BC | pharmasavesalmonarm.com |
| LOOKING GLASS PHOTOGRAPHIC | BERKELEY | CA | lookingglassphoto.com |
| CAL'S CAMERAS & VIDEO INC. | COSTA MESA | CA | calscameras.com |
| BEL AIR CAMERA & VIDEO | LOS ANGELES | CA | belaircamera.com |
| SAMYS CAMERA INC | LOS ANGELES | CA | samys.com |
| OCEANSIDE PHOTO & TELESCOPE | OCEANSIDE | CA | optcorp.com |
| KEEBLE AND SHUCHAT PHOTOGRAPHY | PALO ALTO | CA | kandsphoto.com |
| ACTION CAMERA | ROSEVILLE | CA | actioncamera.com |
| PARDEE CAMERAS | SACRAMENTO | CA | 916-483-3435 |
| GEORGE'S CAMERA EXCHANGE | SAN DIEGO | CA | georgescamera.com |
| NELSON PHOTO SUPPLIES | SAN DIEGO | CA | nelsonphotosupplies.com |
| JIM'S CAMPUS CAMERA | SAN LUIS OBISPO | CA | jimscamera.com |
| RUSS CAMERA & VIDEO | SANTA BARBARA | CA | russcamera.com |
| PAUL'S PHOTO | TORRANCE | CA | paulsphoto.com |
| PHOTO MED | VAN NUYS | CA | 818-908-5369 |
| WOODLAND HILLS CAMERA | WOODLAND HILLS | CA | whcamera.com |
| ANSEL ADAMS GALLERY | YOSEMITE | CA | anseladams.com |
| MIKE'S CAMERA INC. | BOULDER | CO | mikescamera.com |
| BRECKENRIDGE PHOTOGRAPHICS | BRECKENRIDGE | CO | breckphoto.com |
| LESTER A. DINE | Palm Beach Gardens | FL | lesterdine.com |
| SHOWCASE | ATLANTA | GA | showcaseinc.com |
| KAIMUKI CAMERA | HONOLULU | HI | 808-735-5955 |
| HAWAIIAN CAMERA | VARIOUS | HI | camerasupplycenter.com |
| BENNETT'S CAMERA & VIDEO | METAIRIE | LA | bennettscamera.com |
| CANAL GIFT SHOP | NEW ORLEANS | LA | hightechmall.biz |
| CASH & GOLD | NEW ORLEANS | LA | 504-528-9055 |
| CAMERA CENTER | BOSTON | MA | 617-263-0030 |
| HUNTS PHOTO & VIDEO | MELROSE | MA | whhunt.com |
| PENN CAMERA EXCHANGE INC. | BELTSVILLE | MD | penncamera.com |
| ANDREW'S CAMERAS | VIRGINIA | MN | andrewscameras.com |
| PHOTOGRAPHIX UNLIMITED | KANSAS CITY | MO | photographixunlimited.com |
| CREVE COEUR CAMERA INC. | ST LOUIS | MO | cccamera.com |
| SCHILLER & COMPANY, INC. | ST. LOUIS | MO | schillers.com |
| F-11 PHOTOGRAPHIC SUPPLIES | BOZEMAN | MT | f11photo.com |
| THE DARK ROOM | MISSOULA | MT | darkroomofmontana.com |
| BEACH CAMERA | EDISON | NJ | beachcamera.com |
| KURT'S CAMERA CORRAL | ALBUQUERQUE | NM | kurtscameracorral.com |
| SANTA FE CAMERA CENTER | SANTA FE | NM | santafecameracenter.com |
| CASHMAN PHOTO / PHOTO MAGIC | LAS VEGAS | NV | cashmanphoto.com |
| SOUTH PLAZA CAMERA / CASEY'S CAMERA | LAS VEGAS | NV | caseyscamera.com |
| GORDON'S PHOTO SERVICE | RENO | NV | gordonsphotoservice.com |
| KEN-MAR CAMERA & VIDEO | ALBERTSON | NY | kenmarcamera.com |
| BERGER BROTHERS CAMERA & VIDEO | AMITYVILLE | NY | berger-bros.com |
| CANETA CAMERA | AMITYVILLE | NY | caneta.com |
| ADORAMA | NEW YORK | NY | adorama.com |
| B&H PHOTO-VIDEO INC | NEW YORK | NY | bhphotovideo.com |
| MY DIGITAL DISCOUNT.COM | OSWEGO | NY | mydigitaldiscount.com |
| JOHNSON CAMERA | SYRACUSE | NY | johnsoncamera.com |
| STEREO ADVANTAGE | WILLIAMSVILLE | NY | stereoadvantage.com |
| YOUNGSTOWN MICROFILM CAMERA | BOARDMAN | OH | ymcamera.com |
| VAN'S CAMERA INC | CANTON | OH | 330-492-4713 |
| CORD CAMERA | COLUMBUS | OH | cordcamera.com |
| MIDWEST PHOTO EXCHANGE | COLUMBUS | OH | mpex.com |
| CAMPUS CAMERA & VIDEO | KENT | OH | campuscamera.net |
| DAN'S CAMERA CITY | ALLENTOWN | PA | danscamera.com |
| PRECISION CAMERA & VIDEO | AUSTIN | TX | precision-camera.com |
| HOUSTON CAMERA EXCHANGE | HOUSTON | TX | houstoncameraexchange.com |
| CAMERA CO-OP | HOUSTON | TX | cameracoophouston.com |
| PICTURE LINE | SALT LAKE CITY | UT | picturetline.com |
| ACE PHOTO | ASHBURN | VA | acephoto.net |
| MASSEY'S CAMERA SHOP | WILLIAMSBURG | VA | 757-229-3181 |
| ROBI'S CAMERA CTR & DIGITAL | LAKEWOOD | WA | robis.com |
| GLAZER'S CAMERA SUPPLY INC. | SEATTLE | WA | glazerscamera.com |
| HUPPIN'S HIFI, PHOTO & VIDEO | SPOKANE | WA | onecall.com |
| TALL'S CAMERA INC | TUKWILA | WA | tallscamera.com |
| CALUMET PHOTOGRAPHIC, INC. | 10 locations | | calumetphoto.com |

Call 800.403.8089 or go to
www.delkin.com/dealer for more info.

# THE EVERGLADES

**Miami is famous for wild** nightlife, but daytime is for wildlife photography. Glades of cypress and marshland filled with orchids, alligators and egrets wait off the Tamiami Trail, a stretch of U.S. 41 that in an hour takes you straight from Miami to the wild beauty of the Everglades. January's dry season promises clear blue skies and temperate climate. Follow this route down the Tamiami for a day of amazing photos:

**1 Shark Valley.** Your first stop in the Everglades yields fields of sawgrass, plenty of egrets and ibis, and, of course, alligators. These "living fossils," with their craggy skin, make great subjects for black-and-white shots. Park rangers say that they aren't aggressive or likely to bother you as they lounge on the roadside, as long as you keep a 15-foot distance. Too close for comfort? Take a 2-hour tram tour (www.sharkvalleytramtours.com), which guides you safely past the beasts to a 65-foot observation tower for a bird's-eye view of waterfowl and gators below.

**2 Airboat tour.** Numerous and easy to spot from the road, these floating buggy rides through the swamps and marshes are perfect for close-ups of wildlife, as well as landscapes such as the one above, which Allen Maestas captured on the Miccosukee Tribe airboat tour at Miccosukee Indian Village (www.miccosukeetribe.com), just past Shark Valley. Bring a polarizer to cut down on the glassy reflections from the water.

**3 Swamp walk.** En route to Big Cypress National Park, pull off at Clyde Butcher's gallery (52388 Tamiami Trail; clydebutcher.com). Known as the "Ansel Adams of the Everglades," this photographer displays large-format images that will inspire you. Then follow the Tamiami to Oasis Visitor's Center (239-695-1201), where you can take a free scenic swamp walk, if you book in advance during the (surprisingly cool) dry season. This takes you deep into twisted mangroves, hanging moss, wild orchids, and carnivorous bladderwort. It can also sometimes take you through water a few feet deep—so wear something grubby, bring a change of clothes and pack your gear in waterproof plastic. Use long exposures to blur the water and for contrast with the plant life.

**4 Kirby Storter Boardwalk.** Big Cypress National Park is filled with "cypress domes," depressions filled with stands of bald and palm cypress. On Kirby Storter Boardwalk, 7 miles west of Oasis, you can shoot one without getting your feet wet. Trees tower above as you stroll past ferns and orchids. Aim your tele upward to capture bromeliad in the highest branches.

As the day ends, finish off your wet-and-wild road trip by turning left on State Road 29, which takes you right into Everglades City. Feast like a king for less-than-Miami prices on the seasonal stone crab, and cap off your photo adventure with sunset shots over the Chokoloskee Bay.

ALLEN MAESTAS



For more on visiting the Florida Everglades, go to www.nps.gov/ever.

# DELKIN DEVICES

## Making Photography Better

### Can You Burn 25GB in 25 Minutes?

## Blu-ray Drive

$549.99

Quickly and easily archive large quantities of data with Delkin's External 4x Blu-ray drive. Compatible with all types of CD, DVD and BD media, the USB 2.0 drive comes with Nero Essential Suite 3®, a padded carrying case and a free Archival Gold® BD-R disc so you can preserve your data for over 200 years.

### How Many Chargers Do You Have?

## Dual Universal Battery Charger

Innovative Digital Product DIMA 2008 WINNER

$39.99*

You only need one. Charge any two digital camera batteries simultaneously, even your flash unit's AAs. Includes a car adapter for easy traveling and is 110/220V compatible for international use.

*Does Not Include Plates

### What's On Your Sensor?

## SensorScope

Innovative Digital Product DIMA 2007 WINNER

Kit - $149.99

Single - $89.99

New!

New!

Find out with SensorScope. Then, safely & effectively clean your sensor with the only complete digital SLR image sensor cleaning kit.

### Are Your Cards Fast? Reliable?

## Memory

CF PRO UDMA 305X

SD PRO 150X

Don't worry about missing another shot to a memory card error. Delkin PRO cards are optimized for use in professional grade cameras, providing industry leading speed ratings and are backed by our hassle-free lifetime warranty.
See camera store for prices.

## Douglas Kirkland

"I happen to really like the people at Delkin but more importantly I have never been disappointed in any of their products. This summer I used the Delkin CF PRO UDMA cards in the dusty 100 degree plus outback of the Australian Northern Territories and didn't experience any problems after shooting thousands of images on the set of Baz Luhrmann's new film 'Australia'. What Delkin represents to me is: reliable products from a reliable company."

For more information on Douglas Kirkland, go to www.delkin.com/douglas

www.delkin.com | 800.403.8089 | 858.391.1234

ADVERTISEMENT

# MPIX PHOTOGRAPHERS TAKE ON NEW YORK CITY!

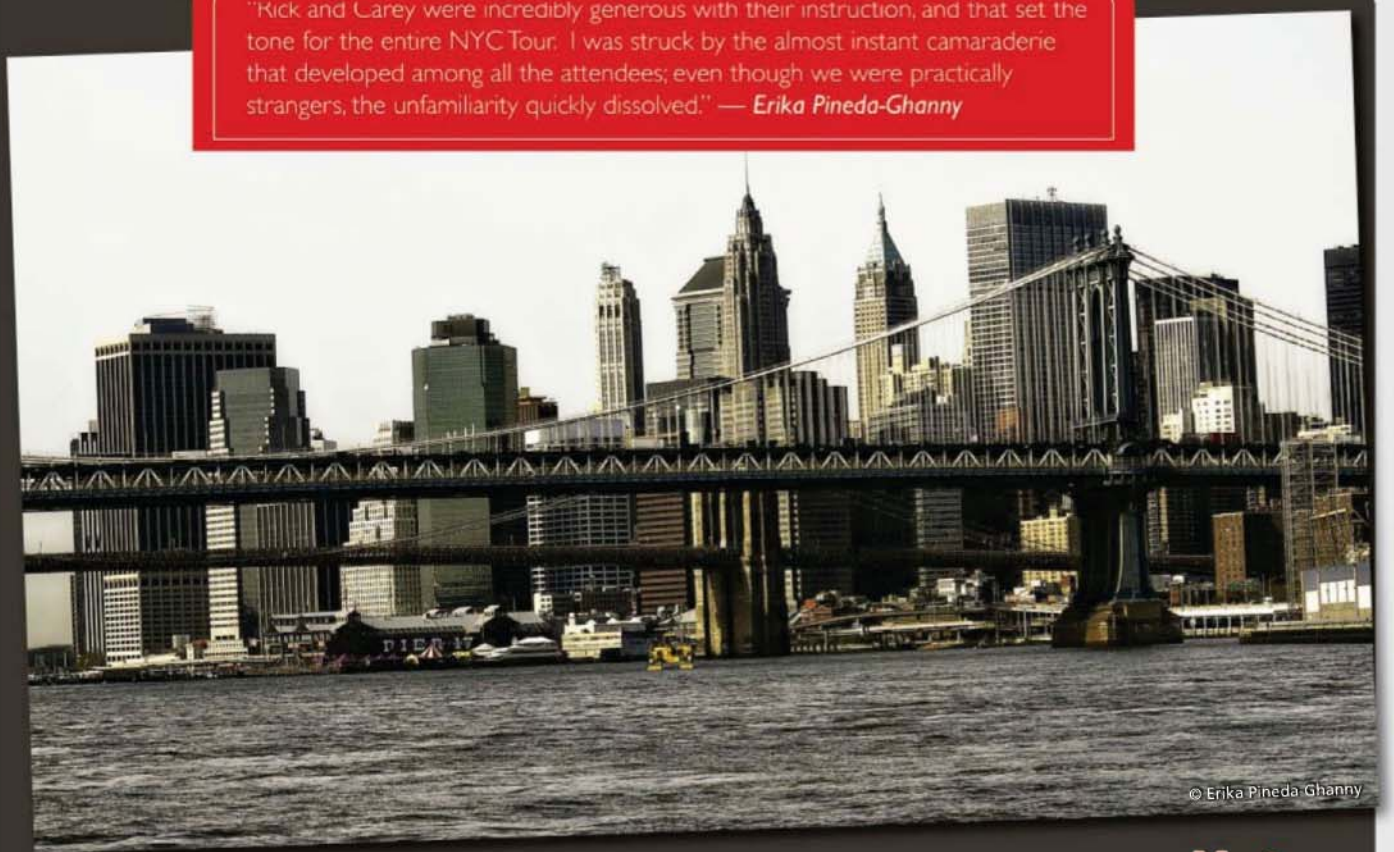
Sixty photo enthusiasts went on the ride of a lifetime during Photo Plus 2008 as they participated in the first ever, **"Mpix Takes on New York City"** photo excursion. Renowned professional photographers Rick Sammon and Carey Schumacher led the group; sharing their technical expertise and providing "hands on" photo tips to attendees aboard a private water tour of Manhattan. With breathtaking views of the Statue of Liberty, Brooklyn Bridge, United Nations and the incomparable New York City skyline as a backdrop, a great time was had by all. Mpix and the *Popular Photography* and *American PHOTO* Events Team wish to thank everyone who participated in this amazing adventure!

© Daniel Greenwood

"I have been visiting Manhattan for almost 25 years and I can honestly say the stimulation of being part of this event, the visions Mpix gave us and the opportunity to experience that day on the boat, brought my passion for the art of photography to a new level." — ***Daniel Greenwood***

Log-on to the new **www.Mpix.com** and visit our blog to see more attendees' images

"Rick and Carey were incredibly generous with their instruction, and that set the tone for the entire NYC Tour. I was struck by the almost instant camaraderie that developed among all the attendees; even though we were practically strangers, the unfamiliarity quickly dissolved." — ***Erika Pineda-Ghanny***




BROUGHT TO YOU BY: AMERICAN PHOTO Popular Photography Mpix

By Debbie Grossman
& Dan Richards

# Strange color

Crop

Before▲
After▶

## BLUR BALLET
## Clayton Ravsten
## Camas, WA

**The problem:** Photographer Clayton Ravsten was shooting his granddaughter's dance recital, at which flash was not allowed. So he used the time-honored technique of using a shutter speed slow enough to create an impressionistic blur (think Degas). We believe the technique succeeded quite well, but—*ow!*—that color. It looks as though the automatic white balance overcompensated with too much yellow. The resulting color scheme is way too primary for this subject.

**What now:** We used Adobe Photoshop CS3's Curves to manipulate individual color channels. We subtracted yellow and added green (which has the effect of subtracting magenta). We found that the background color was still distracting, so we lowered its saturation in a separate adjustment layer. While we were at it, we leveled the horizon and cropped a bit off the bottom. We were trying for a light, pastel effect that would complement the subject.

**Next time:** A white balance preset (namely Tungsten) would have worked better than using Auto WB. An alternative: Shoot in RAW, which gives you plenty of leeway to adjust color after the fact. (The camera Ravsten used doesn't allow RAW capture, unfortunately.)

**Tech info:** Canon PowerShot S5 IS, 0.4 sec at f/3.5 in Program mode, ISO 200. Minor cleanup in Adobe Photoshop Elements 4.

## POOL PARTY
**Adam Berent**
**Toronto, ON, Canada**

**The problem:** We like the surreality of this perfectly symmetrical, frame-within-a-frame picture—it could almost be a photorealistic painting. The long exposure combines the eerie stillness of the water and foreground plants with the dreamy blur in the palm trees. That's why we wanted to see more exposure in the background: To bring out the blur, and add more pop.

**What now:** As photographer Adam Berent had shot in RAW, we processed two TIFFs from the same file, one for the highlights and the other for the shadows. We then combined these elements in Photoshop—making a kind of high-dynamic-range (HDR) photo—and did a little color correction, too. We noticed that the columns bowed out due to barrel distortion (the lens' fault, not Berent's!), so we straightened them using Photoshop's Lens Correction filter.

**Next time:** This isn't so much a fix as an alternative interpretation. We wanted a weird dreamy quality, whereas the photographer had something a little more realistic in mind. This is what makes photography fun—there's always room to play.

**Tech info:** Canon EOS Digital Rebel XT with 17–85mm f/4–5.6 Canon EF-S IS lens, 30 sec at f/8, ISO 100.

Holds a laptop
New Super-Sized Adventure 10
model 5550 Photo/Laptop Backpack
Holds a laptop
Tamrac's Adventure Series photo backpacks are lightweight, uniquely designed backpacks with discreet, foam-padded compartments for camera gear and large top sections for other stuff. The Adventure 9 and 10 also have a separate compartment to hold most 17" screen laptops.
Adventure 7 model 5547
Adventure 6 model 5546
Adventure 9 model 5549 Photo/Laptop Backpack
Go online or call for our FREE 80 page color catalog
1-800-662-0717
www.tamrac.com
See the entire Adventure Series and over 170 other products.
tamrac®
PHOTO, LUGGAGE & COMPUTER CASES

## Photo Anatomy

## Why It Works

■**Fundamentals:** Multiple curves and diagonals, use of monochrome, deep perspective.

■**Curves and diagonals:** The shoreline curve joins up with the landmass in the background to form a near S-curve. The streaks in the clouds add to the dynamism.

■**Monochrome:** After converting it from a RAW file to a b&w TIFF, photographer Guy Tal also toned it in Adobe Photoshop CS2 for a selenium effect. It makes for a brooding quality (and retro look) that you wouldn't get in a straight color rendition.

■**Deep perspective:** By shooting a vertical, Tal was able to include snow and salt virtually at his feet, to further the sensation of depth.

GUY TAL/GUYTAL.COM

# Really Right Stuff

## your camera support experts

custom camera L-plates – mount in landscape or portrait!

superior quick release clamps

top-quality ballheads

...and the best tripods available

## *from the ground up, Really Right Stuff® delivers gear you need*

We design, build, aquire and sell the very best tripods, ballheads, quick-release clamps, and quick-release plates available anywhere. From the casual weekend shooter to the most demanding professional, discriminating photographers in over 80 countries around the globe rely on the experts at Really Right Stuff for all their camera support gear. Our quick-release system makes setup faster and easier, and better stability means better results. Call us now to receive a copy of our 68 page catalog, or visit us online at http://reallyrightstuff.com.

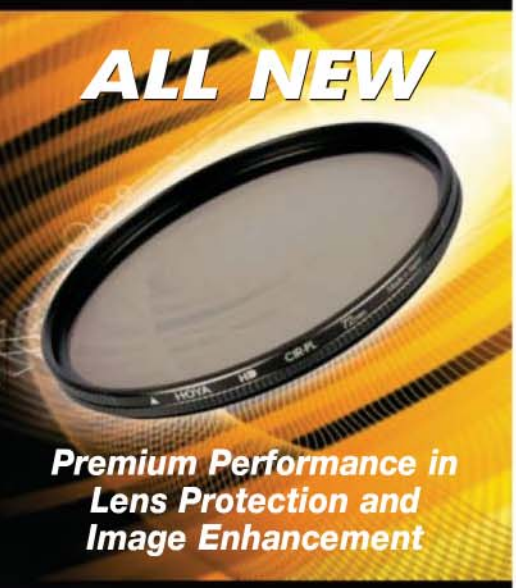
Available at:
Really Right Stuff, LLC
205 Higuera St
San Luis Obispo CA 93401 USA

http://reallyrightstuff.com
(805) 528-6321
or toll-free in US & Canada (888) 777-5557

Really Right Stuff® is a registered trademark of Really Right Stuff, LLC

HOYA
HD
FILTER SERIES

ALL NEW



Premium Performance in Lens Protection and Image Enhancement

HD GLASS
High Density Sharp Cut UV Glass
•
Chemically Enhanced Optical Glass is 4x Stronger
UV

HD COATING
8-layer Anti-Reflective Multi-Coating
•
Water Repellent
Scratch & Stain Resistant
UV / CIR-PL

HD FRAME
Wide-Angle Lens Compatible Ultra Thin Frames
•
Hi Pressure Press-Mounted Frames
UV / CIR-PL

HD POLARIZING FILM
High Transparency & High Durability UV Absorbing Film
CIR-PL

HOYA is a registered trademark of Hoya Corporation.

EXCLUSIVE DISTRIBUTION BY:
THK PHOTO PRODUCTS, INC.
Tokina • HOYA • Kenko • SLIK
7642 Woodwind Drive, Huntington Beach, CA 92647
Visit our website for more information at
www.thkphoto.com

PICTURE DOCTOR

# 7 Reasons to Go Vertical

**When should you shoot a vertical? Whenever you shoot a horizontal. Seriously, many photographers overlook the advantages of the vertical shot, which are many.**

■**Portraits:** Verticals aren't called "portrait orientation" for nothing. The 3:2 aspect ratio of most film and digital SLRs closely matches the proportions of the human face. The best way to avoid a distracting background is to leave it out to begin with, so turn that camera sideways and fill the frame with the face.

■**Deep space:** Verticals let you get a wider angle of view with the same focal length, as they can take in low foreground detail without losing the background **(A)**. For another example, see Guy Tal's scenic on the previous page.

■**Reflections:** For those puddle/pond reflections, go vertical. This will let you take in more of the skyscraper or the mountain. Try framing nothing but the puddle reflection.

■**Dynamic space:** The vertical (standing) format is inherently more dynamic than the horizontal (reclining) format. If the picture looks flat and lackluster, add a jolt with a vertical. Curves and lines moving through the frame help here **(B)**.

■**Neater stitches:** If your widest-angle lens isn't wide enough to capture your subject, and you decide to stitch, verticals attached along their long side give you a more manageable final image shape (a conventional rectangle) than merged horizontals, which become unwieldy long ribbons.

■**It's only natural:** Some things are by their nature verticals—skyscrapers, redwoods, statues, giraffes **(C)**. You'd be surprised how many people forget this.

■**Defy expectations:** Take verticals just for the heck of it, even if you know it *should* be a horizontal. Look for an interesting crop of the big horizontal scene. You never know.

# What's that for?

**The function (or custom) button:** Many DSLRs have a button you can program to perform a single function, such as autofocus lock, depth-of-field preview, ISO, white balance, flash-exposure compensation, drive mode, or dynamic-range control. You program it through the menus, usually the setup folder. **What to set it for?** Use your camera a lot, and see which control drives you batty from having to rummage through a menu or a jam-packed control panel to get to it. *That's* the one to assign to the button. **Buttoned down:** Several Sony Alpha models, such as the A700, shown here, sport both a function button (which accesses lots of controls) and a custom button (which accesses the one control of your choice).

# Tokina

## ALL NEW
## AT-X 116 PRO DX
## AF 11-16mm f/2.8

One Touch FC Focus Clutch WR Weather Resistant

Available Mounts:
Canon and Nikon Digital Cameras
with APS-C sized sensors

The new Tokina AT-X 116 PRO DX is an ultra-wide angle lens with a lightning fast f/2.8 aperture for better photography in low-light situations. Many photojournalists consider having an f/2.8 apertured lens a must. Based on the award-winning optical design of the AT-X 124 PRO DX (12-24mm f/4) lens, the new AT-X 116 PRO DX has a short zoom range to maintain optical quality at wider apertures. With Tokina the difference is clear.

**More Wide-Angle lenses!**

**AF 12-24mm f/4**
***AT-X 124 AF PRO DX***
*Super Wide-Angle Zoom*

**AF 10-17mm f/3.5-4.5**
***AT-X 107 DX Fish Eye***
*Round Your World*

EXCLUSIVE DISTRIBUTION BY:

**THK PHOTO PRODUCTS, INC.** | 7642 Woodwind Drive, Huntington Beach, CA 92647
Tokina • HOYA • Kenko • SLIK | Visit our website at **www.thkphoto.com**

TO FIND OUT HOW THIS WAS DONE...JUST TURN THE PAGE ↻

**B.Y.O. LIGHTING:** The best approach to shooting clubs, says Erik Seo, is to bring your own off-camera strobes. The two main lights here: Seo's balcony-mounted AlienBees 1600s, fired with PocketWizard Plus 2 radio triggers. Sepia-like tone created with an extreme white balance shift in Adobe Camera Raw.

ERIK SEO, WWW.ERIKSEO.COM

SLIK
PROFESSIONAL
Durable, Affordable

PRO 700 DX
Max Height: 74.80 in.
Max Load: 15.00 lbs.
Weight: 7.05 lbs.
SUPER A.M.T. ALLOY

PRO 500 DX
Max Height: 63.95 in.
Max Load: 10.00 lbs.
Weight: 5.47 lbs.
SUPER A.M.T. ALLOY

SLIK Super A. M. T. alloy uses a mixture of Aluminum, Magnesium and Titanium to form an alloy stronger than regular aluminum yet much more light-weight.

For professionals, the PRO 700 DX is a sturdy tripod that will hold up to years of regular use. The PRO 500 DX is a slightly smaller and lighter version with the same features.

For enthusiasts, the PRO 330 DX and PRO 340 DX are compact and light-weight for easy use and easy traveling.

EXCLUSIVE DISTRIBUTION BY:
THK PHOTO PRODUCTS, INC.
Tokina • HOYA • Kenko • SLIK
7642 Woodwind Drive, Huntington Beach, CA 92647
Visit our website for more information at
www.thkphoto.com

**YOU CAN DO IT** Text and photos by Erik Seo

# LIVEView

## Shooting a rock club can be totally awesome

### Are you ready to rock?

At concerts, the raw excitement often inspires an audience to pull out their camera phones and snap away. Concert pictures that really seem *in the house*, though, are far from snapshots. As the house photographer for Club Harry O's in Park City, UT, I know.

Your highest hurdle: lighting. The color, intensity, and direction of stage lights change during every number. Worse, clubs can be hopelessly dim. Some nights, dialing in 1/60 sec, f/1.8, and ISO 3200 still leaves you 2 stops underexposed.

The best solution? Off-camera flash. Hanging radio-triggered strobe units in clubs can be easy—they often have balconies, exposed rafters, and light towers for just that purpose.

Not an option? Have a friend hold a wireless flash from the floor or balcony. You can buy radio flash triggers inexpensively online.

The trick to strobes is making their output seem part of the overall lighting design. This means aiming them indirectly and warming them up a bit with gels. Don't light the band from the front, and definitely not with an on-camera flash. If you're working with two or more lights, vary the ratio so one is dominant—that will add depth.

When stage lighting brightens, I turn off the strobes and use the available light. A high ISO and shutter speeds of 1/125 sec or faster will work.

At slower speeds, I "spray and pray"—machine-gunning hundreds of shots, while hoping a few will work. Another ambient strategy: Paying close attention, and tripping the shutter when the subject is keeping relatively still.

A few more tips:

- **CAPTURE IMAGES IN RAW,** not JPEG, to give yourself the leeway to fix color and density in postproduction.
- **COMPOSE FOR THE AUDIENCE,** stage, and hall, as well as for the band. An active crowd and colorful stage set can add energy that typical band-only shots lack.
- **SELECT CAMERA ANGLES** so stage lights stand out against dark or contrasting backgrounds.
- **START PHOTOGRAPHING** in smaller clubs and get to know the managers, security people, and lighting directors. Their cooperation is vital for you to take photos that really rock.

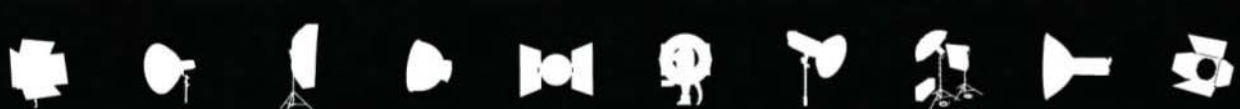
**LIGHT MUSIC:** This shot of singer John Legend gets added dimension, thanks to two AlienBees 1600 strobes (main to his right; fill, left) set to different power levels.

# A Lighting System That's Out of This World

Photography is all about problem solving, and the more tools that you have at your disposal, the more problems you will be able to solve efficiently. That is the premise behind the Calumet Travelite flash system. This comprehensive lighting system begins with two self-contained monolights, a 375w/s unit and a 750w/s unit.

What makes the Travelite system so special is its vast selection of dedicated accessories. Whether you're shooting portraits or products, you'll appreciate the range of reflectors that allow you to go from high-key to super-soft in one simple motion. Changing the angle and direction of light is equally easy with a variety of grids, snoots and barn doors. These light modifiers are also compatible with Calumet studio flash systems and Bowens flash systems. For unlimited flash possibilities, a rechargeable Travel-Pak is available that allows up to 300 full-power flashes from a single charge.

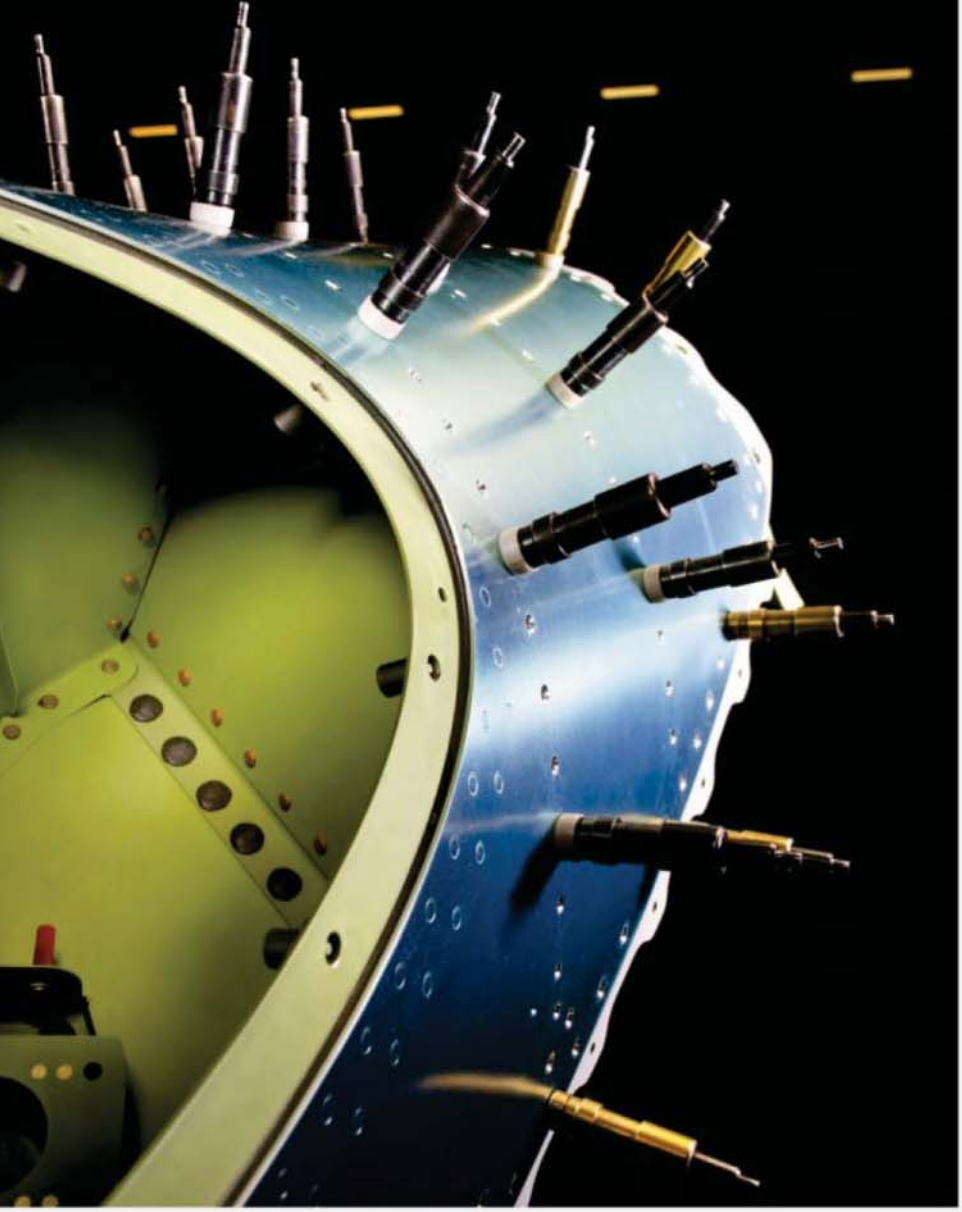
Travelites are sold separately or in convenient, money-saving kits that include all you need to get started taking professional-quality flash photographs. Travelite kits are also available "for rent" at reasonable daily and weekly rates from each of our retail locations. Call or visit our website for details.



**Order Your Travelites Today, Exclusively at Calumet.**

www.calumetphoto.com 1.800.CALUMET (225.8638) 10 U.S. Retail Centers

CALUMET PHOTOGRAPHIC
IT'S WHERE THE PROS GO



# AIRCRAFT

## Lighting turns spare parts into rare art

**Aerospace engineers rarely** prize form over function, but the photographer who shoots Boeing's corporate annual reports sure captures the beauty in their designs. "What I love about aerospace is that the end product is so sculptural and graphic, like shooting pieces of art," says Seattle-based Jeff Corwin (www.jeffcorwinphotography.com). "The components have great textures and surfaces, and it's fun to play with colors on the metal."

He uses an old Hasselblad Flexbody medium-format camera with a Phase One digital back for his still-lifes. But you can use a DSLR to similar effect. The trick is in the lighting—and while he brings his studio lighting gear to the factory, you can substitute off-camera flashes and accessories.

Here are Corwin's tips on how to turn an industrial object into an *objet d'art*.

**1 Go wide for depth.** Corwin wanted everything from the front of this unfinished 4-foot-high aircraft part to the ceiling lights to be in focus. So he used a small aperture (not recorded in the file data) on his Hasselblad 40mm lens (equivalent to about 26mm on a full-frame DSLR). Wide-angle lenses give you a greater depth of field than teles at a given aperture and distance.

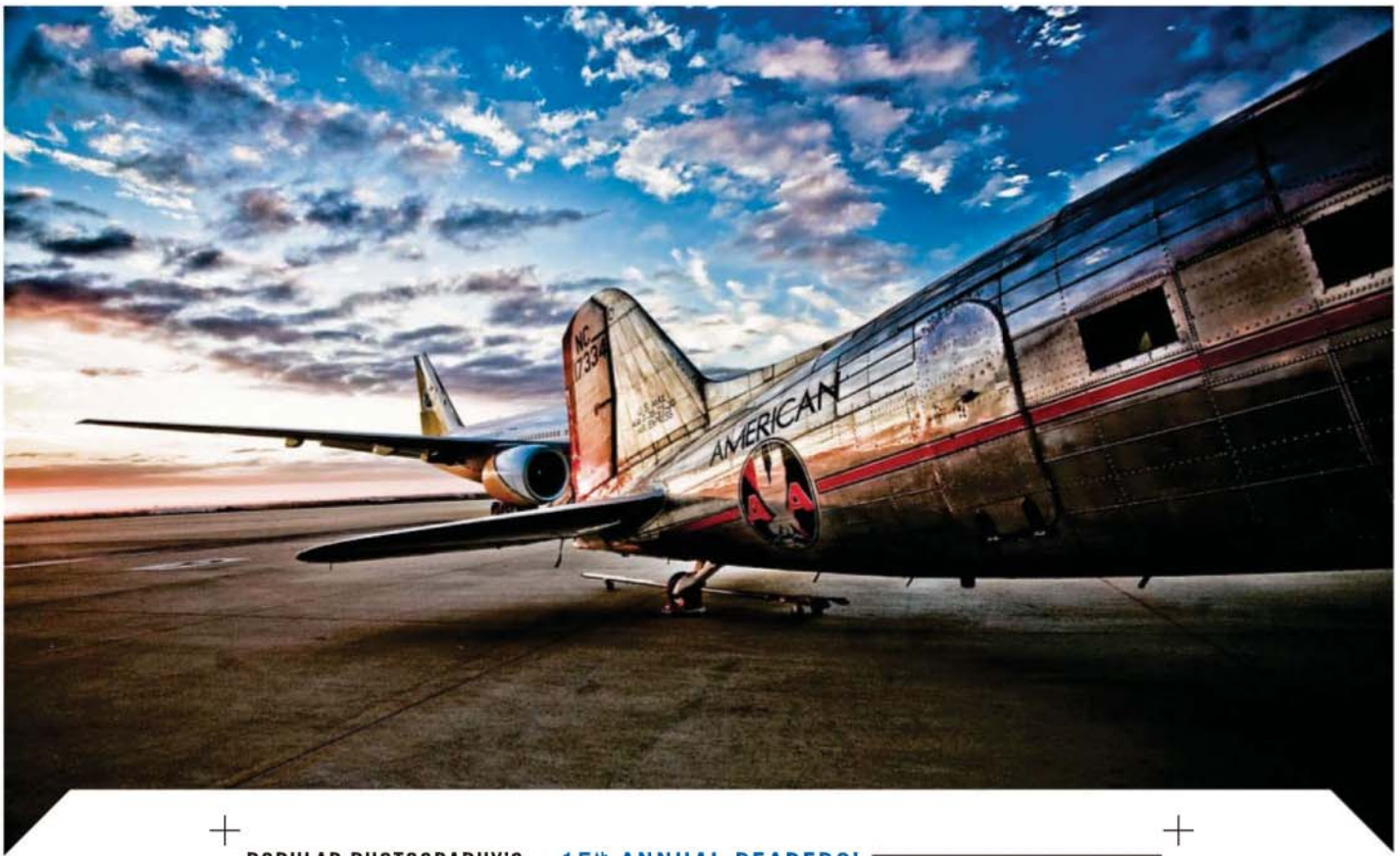
## TIPS FROM A PRO

### Text by Laurence Chen
### Photo by Jeff Corwin

**2 Knock the ambient light down;** light the subject up. Factories are messy, chaotic places—Corwin found his subject on a workbench with other pieces scattered about. But it was easy for him to imagine a composition involving the shape of the part against a black background. "I gravitate towards simple shapes and find a way to eliminate all the things around it," he says. When you're using deep focus, clean up the visual clutter by underexposing the surroundings. Here, exposure was 1/500 sec at ISO 100, too little to capture any of the background except for the ceiling lights. He lit the subject with strobes.

**3 Light across surfaces.** Corwin aimed a light at a low angle across the subject to reveal the metal's texture and shape. He positioned the light above and to the right of the camera to cast shadows back towards the viewer. (Beware of lens flare when aiming light this way.) A grid spot kept the light off the messy workbench. Although he uses Profoto 2400-watt-second Pro-7 power generators and strobes, you can use wireless speedlights instead—narrow the beam by zooming the flash head to telephoto, or (better) attach a grid spot. Then, to keep the highlights bright, dial up the flash output to +1 to +2 EV in automatic mode or set the power manually. Test shots help determine the correct flash output and light falloff, focus, and depth of field. Any light you add may increase the overall exposure, so be careful not to blow out highlights.

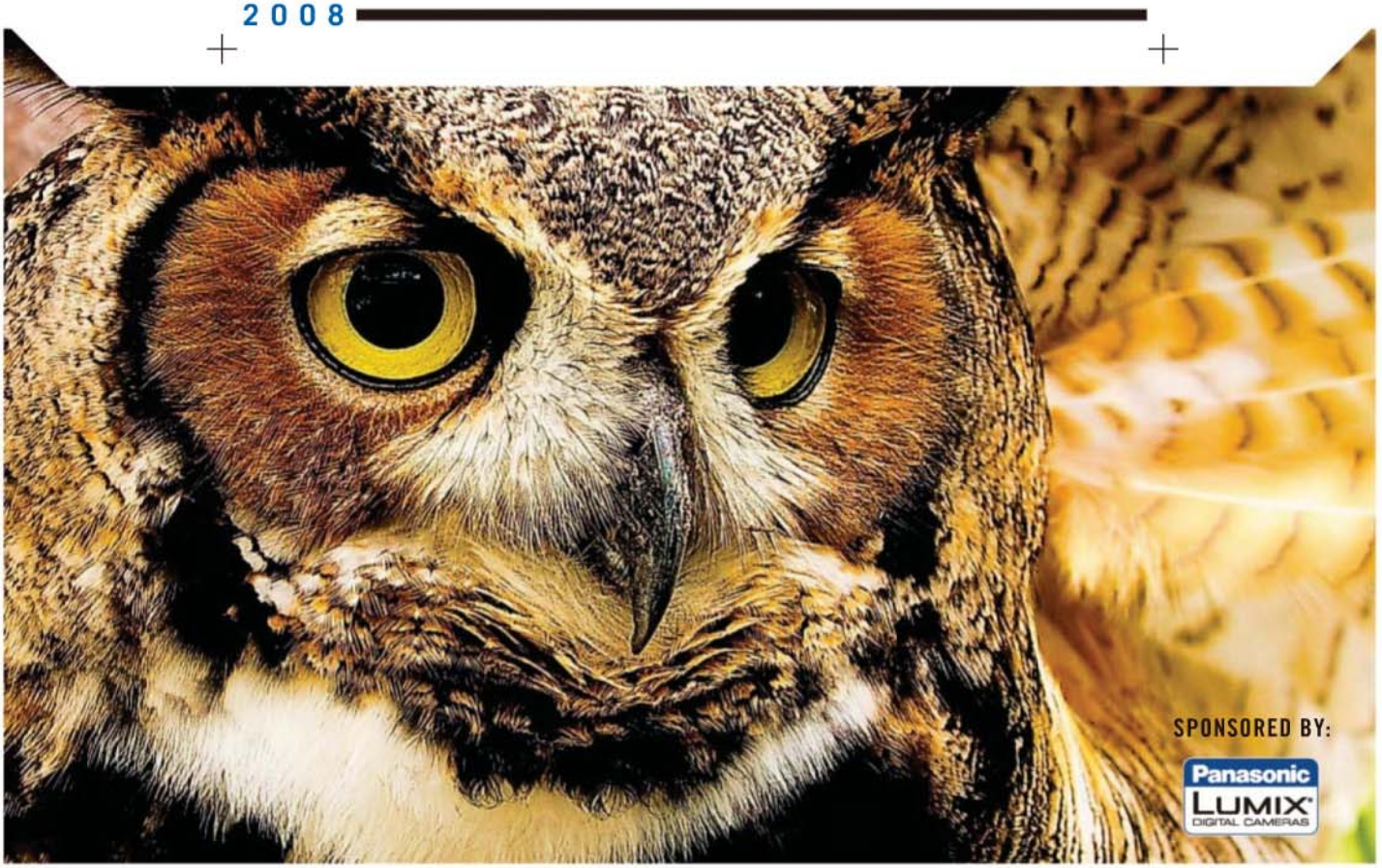
**4 Fill in shadows.** Two more lights complete the photograph—another grid spot aimed inside the component (at center-left) and a large softbox above and slightly right of the entire object. Again, test shots will help you determine the output. Corwin set the power of the left-hand spot about 1 EV less than the first one, and he brought the softbox's power up just enough to even out the illumination along the curving edge. While he didn't use colored gels for this image, when he does, he likes to play warm tones against cool, avoiding strong, saturated colors.




POPULAR PHOTOGRAPHY'S • 15th ANNUAL READERS'

# PHOTOCONTEST

2008



SPONSORED BY:

Panasonic LUMIX DIGITAL CAMERAS

**GRAND PRIZE WINNER:**
Alex Braverman
Fort Worth, TX

**These days, you'd be hard-pressed to catch Alex Braverman without his camera.** By his own estimate, he spends about 12 hours most days on photography, which leaves just a few hours for sleeping, eating, and taking care of all of the other business of being human. But this is a recent phenomenon. Just four years ago, Alex was an entrepreneur with a background in mathematics and computer science. And while he was very successful, a part of him never forgot how he had felt as an 8-year-old boy in Lithuania when he held his first camera. "It was old and dirty, but I loved it," he says of the gift from his grandmother. He even made the bathroom into his darkroom. "I remembered the feeling of taking something out of real life and putting it into 'paper life,'" he adds. And, luckily, the path of our passions often runs circular. "I had the opportunity to pursue photography full-time," says Alex, who has since graduated from New York Institute of Photography and taken three *Popular Photography* Mentor Series workshops, "and now that's all I do, day and night. Photography is my life."

This is why he traveled from his home in Fort Worth, Texas to New York City last July to attend another photo workshop. Arriving a day early to get in what he likes to call "photo hunting," Alex was able to capture a couple hundred images as he walked the city's streets, including this one. "Shooting with a fish-eye makes it all so self-contained," he begins. "It says 'This is the world—nothing else exists.'"

Nevertheless, Alex is not interested in portraying the real world in his photography. "I consider myself an artist, not a craftsman. It's not my job to convey life as it is but to create something beautiful that you can put on the wall and admire," he says. He believes that by allowing himself to be "totally fearless" in his art, he is best able to express himself. And he gives this advice to novice photographers, "Figure out what you want to say. Otherwise, it's just a snapshot." To view more of Alex's work, visit *www.michelangelo-project.com.*

**WINNER:**
Danny Podkowa
Portland, OR

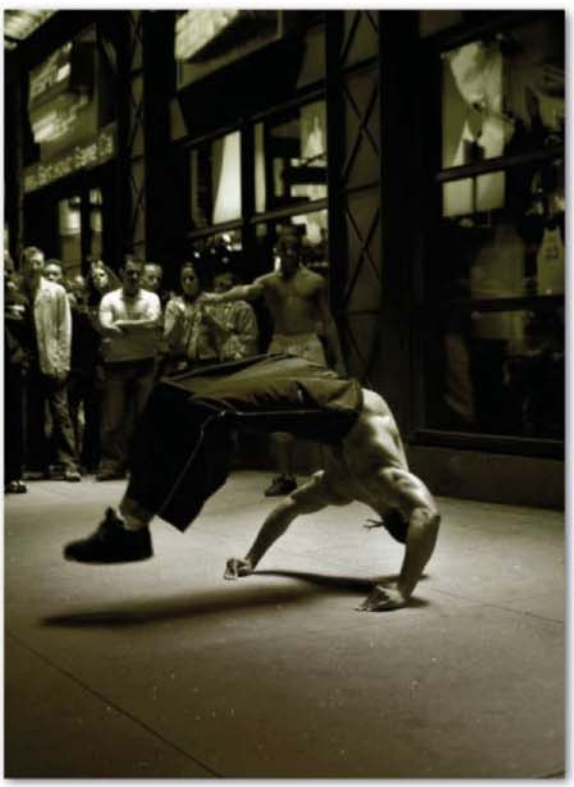
**Pod (Danny Podkowa) has a singular passion:** skateboarding. If he's not skateboarding, he's thinking about skateboarding. Perhaps the only thing that rivals this first love is photography. "I live and breathe skating," Pod says, who has been active in the sport since 1985, "and I shoot it as often as I can. I guess it comes easier to me than most folks, because I know when the climax of a trick is going to be."

Pod says that he always thought that skateboarding would be cool to shoot, but it wasn't until he was in college that he seriously picked up a camera. "I had to make a slide show for an art class, so I borrowed my dad's camera, a Minolta x-700—and kinda never gave it back," he recalls with a laugh. Since then he's found a way to juggle his full-time job as an offset printer, teach himself photography, and continue to board, even combining them all into a free zine called *Sauce*, which he publishes.

One day during a particularly brisk spring that, according to Pod, "we called Juneuary," a vanful of skaters, including Pod and rising star Chaz Pineda (pictured), made their way to a skate park in Donald, Oregon, a small town about 25 miles south of Portland. As Chaz skated, Pod shot. Using his Nikon D300, a fish-eye lens, as well as two Nikon sb800 flashes remotely triggered, and inching as close as possible to the tricks, Pod got this Phillips Air. He says, "The thing I love most about skateboarding is its expression of freedom and individuality." To view Pod's zine, check out *www.sauceskateboardzine.com*.

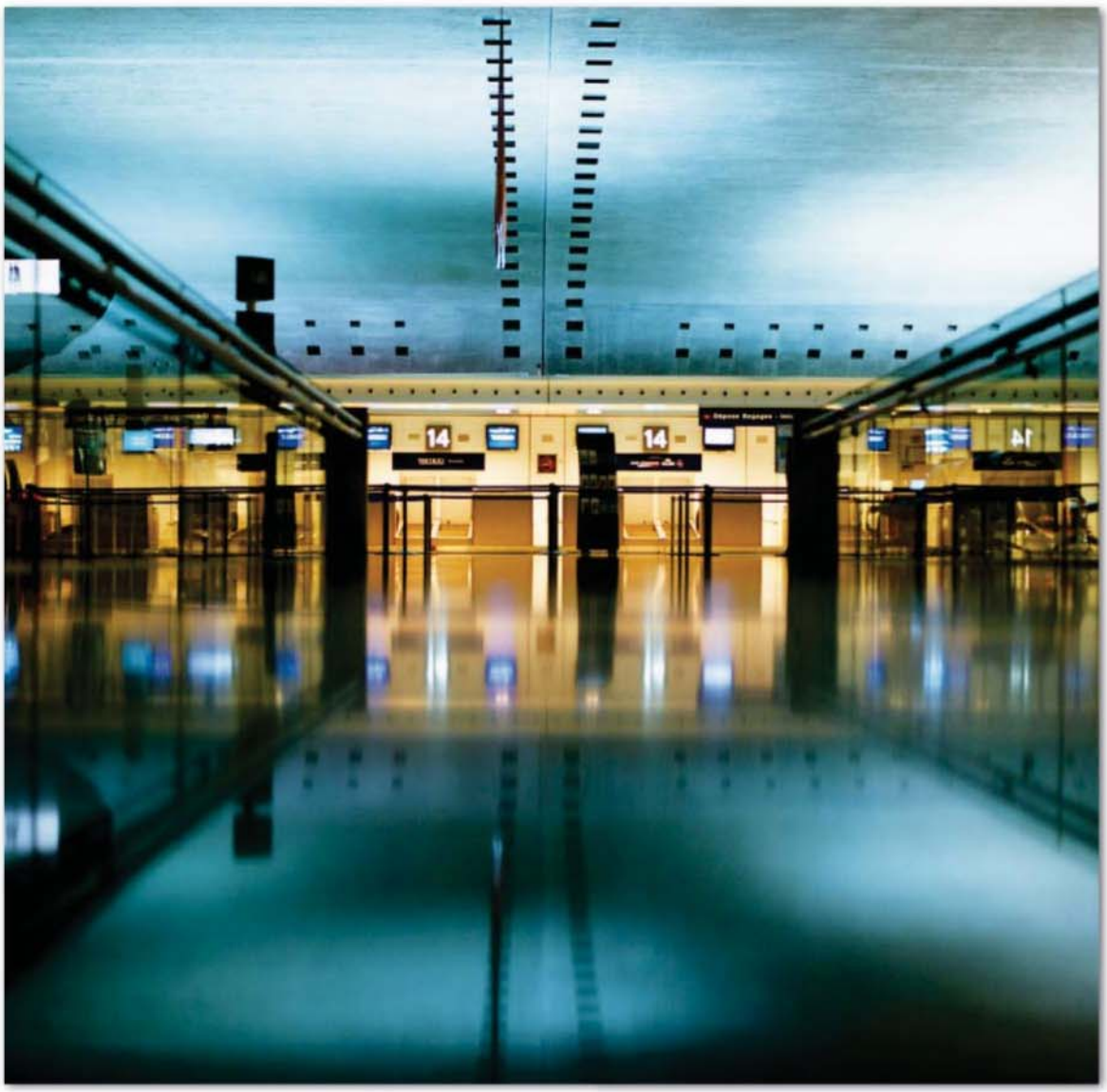
◀ **RUNNER UP:**
David K. Chan
Davis, CA

▼ **RUNNER UP:**
Jurgen Leo Foley
Newcastle West,
Co. Limerick,
Ireland



▲ **RUNNER UP:**
Raoul Sanda Matundu
Orange, NJ

**RUNNER UP:** ▶
Mike Edwards
Orlando, FL




▲ **WINNER:**
Estelle Dougier
Paris, France

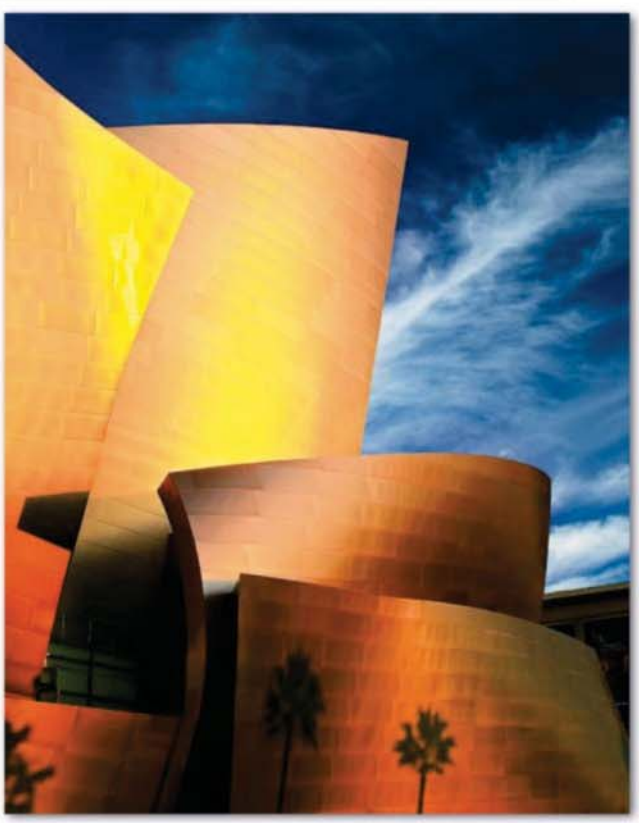
**What do you get when you give a lawyer a camera?** It sounds like the beginning of a bad joke—unless that lawyer was Estelle Dougier. Now a professional photographer, Estelle made her first foray into photography while pursuing her master's degree in international law at Columbia University in New York City (an ocean away from her native France) by taking classes at the International Center of Photography on the weekends. "It became my passion," she says.

Whether she's shooting on an empty street or at the Moulin Rouge, most of Estelle's work uses darkness—or the idea of night—as a backdrop. This winning image, taken at the Charles de Gaulle airport before the world had had a chance to wipe the sleep from its eyes, is no exception. "I had to take a plane, so I went in really early, maybe 5 a.m., to photograph," Estelle says. "To me, this picture conveys a sense of loneliness." She stood outside, and the gates were opening and closing as she shot. She intentionally blurred the foreground to focus on her purpose. "A lot of my pictures are like that because my camera is not automatic," she says. "I like to control the art, not let the camera decide." To view more of her work, visit *www.estelledougier.com.*

**RUNNER UP:**
Todd McDonald
Tampa, FL

**RUNNER UP:**
Seth Roros
Mechanicsburg, PA

**RUNNER UP:**
Sam Li
Bellaire, TX



**RUNNER UP:**
Dean C. Vu
Westminster, CA

▲ **WINNER:**
Faisal Almalki
Riyadh, Saudi Arabia

**Egypt is very photogenic**—think: the Great Pyramids, the Sphinx, and the Valley of the Kings. However, that was not all that Faisal Almalki set out to capture on his visit: He had heard that some camels give their owners a kiss, and he wanted to see if he could get a photo of it. After he found this agreeable pair and took a few shots, "the guy looked so unnatural," Faisal says. "I asked him jokingly, 'Did you guys have a fight last night?' And then I got this, which was even better." He's titled the image *Happy Together!*

The photo has already received a good deal of attention: It was awarded Best in Category in *National Geographic*'s World in Focus 2007 competition. "Most people smile when they see it," Faisal says, " but I once had someone ask me why I didn't Photoshop the picture to get rid of the guy's yellow teeth. I said, 'If he didn't spend time on his teeth, neither will I.'"

Always interested in the arts on some level, Faisal was unable to study the field, because, at that time, there were no schools in Saudi Arabia that offered this focus. Instead he pursued the closest thing he could: advertising. Four years ago, he took up photography as a hobby, but it quickly became a passion, "I probably have 20 years worth of photos," he says. In the beginning, he kept his work to himself, but once he joined online forums and received positive support, he began to enter competitions—and win. In fact, he was recently nominated for a Lucie Award. "I'm extremely honored to be selected by *Popular Photography* in this year's competition for my image of the camel and its owner," he says. "Right now, I'm smiling as much as both of them." To view more of Faisal's work, visit *www.exactish.com.*

◀ **RUNNER UP:**
Feldy Suwito
Clarksburg, MD

▼ **RUNNER UP:**
Anthony M. Tortoriello II
Barrington, IL

▲ **RUNNER UP:**
Abbie Warnock
Sandy, UT

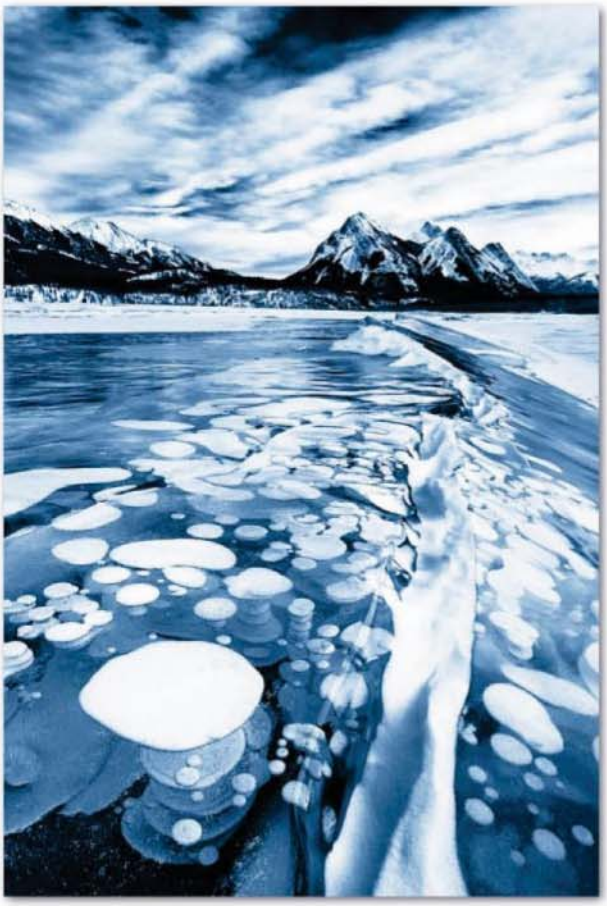
**RUNNER UP:** ▶
Bernard Bowles
Laval, Quebec, Canada

**WINNER:**
Robin Harrison
Ocean City, MD

**The great egret is nature's haiku.** There's a poetry in its plumage, which is white as a full moon and, in breeding season, sticks out here and there like a pillow that's been through one too many pillow fights. Robin Harrison framed this nesting pair in Florida with her Canon 5D. Hundreds of miles away from her native Maryland, she was in the state attending a photo festival last May and took a four-day workshop at the St. Augustine Alligator Zoological Farm.

About 65 American Alligators lurk in the wetlands at the farm, and every year herons, ibis, spoonbills — and, of course, egrets — migrate here to roost. The alligators provide the birds with a built-in security system, and the birds provide the alligators with an occasional snack. It's about as close as nature gets to the lion lying down with the lamb. From the boardwalk that takes visitors into the heart of the rookery, Robin spotted these egrets. "I got lucky with this image," she says. "It's unusual to get their heads together like this."

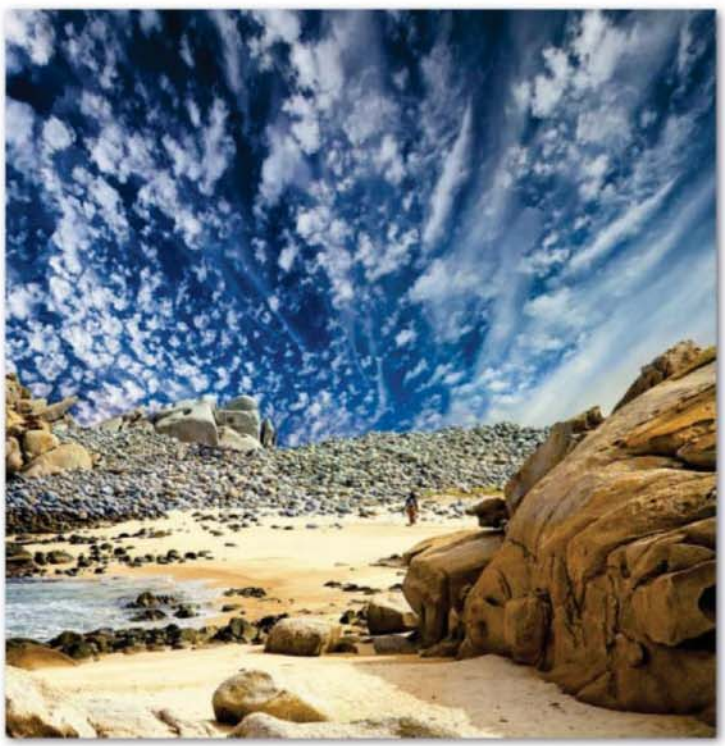
Robin discovered photography 15 years ago when she bought her first telephoto lens to take pictures of her kids playing sports. Since then, she's shot everything from her rabbits and deer in her backyard, to wild ponies that roam nearby Assateague Island, to canyons at an Arizona. "I learn just as much from other photographers as I do from the instructors," she says. And, although she claims to "not have an artistic bone my body," she's worked hard a developing her composition skills, which this image beautifully displays.



**RUNNER UP:**
Darwin Wiggett
Cochrane, Alberta, Canada

**RUNNER UP:**
Jack Levy
Weston, FL

**RUNNER UP:**
Karen Meyer
San Francisco, CA



**RUNNER UP:**
John Pollock
Tucson, AZ

**WINNER:**
Dina Goldstein
Vancouver, BC, Canada

**When the bell sounds and the thoroughbreds burst through the gate** at Hastings Racecourse in Vancouver, British Columbia, you can bet that most eyes in the house are turned toward the track ... but not photographer Dina Goldstein's. For four years, Dina worked on a project she calls *Trackrecord*, shooting portraits of all of the colorful characters that populate the place.

At the time, many of the walls were painted a shade of blue, striking similar to the complexion of Papa Smurf. After Dina spotted a potential subject, she would ask to take their portrait against one of the walls, engaging them in conversion while she shot. "It was an interesting, unique, and sometimes dangerous group," she says with a laugh. Dina saw this woman walking with her husband, eating ice cream, and asked to take her picture. "I didn't notice until later that she had a little bit of ice cream on the corner of her mouth," she says. "I think people really connect with her even though she's older, because there's something fresh and childlike about her. She still has that twinkle in her eye—and we all want that."

A veteran photographer of 15 years, Dina credits her success to working hard from day one. And regardless of what assignments she takes, she keeps busy with a personal project, like her most recent *Fallen Princesses* series. To view more of her work, visit *www.dinagoldstein.com*.

**RUNNER UP:**
Kevin Cozma
Takamatsu, Kagawa, Japan

**RUNNER UP:**
Faisal Almalki
Riyadh, Saudi Arabia

**RUNNER UP:**
Martina Brandstetter
Munich, Germany

**RUNNER UP:**
Monica L. Shulman
New York, NY

▲ **WINNER:**
Gail Vitikacs
Potomac Falls, VA

**It's 1 a.m, and the world is quiet.** Most people are dreaming, wrapped in the pitch-black comfort that the deep of night affords—but not Gail Vitikacs. By day, Gail is a wife, mother, and IT employee. But nightfall often finds her in downtown D.C., Nikon in hand, among the shadows of monuments on The National Mall. Were it noon, the place would be thick with tourists and she'd have to vie for Lincoln's gaze. At her chosen hour, it's just her, a photographer friend, and sculpted marble, granite, and sandstone bathed in moonlight.

On the frigid January day that this photo was taken, the tilt of the earth brought dusk by 5:40 p.m. As the crowds dispersed to seek shelter and warmth, there was Gail, under the Ulysess S. Grant Memorial, waiting for her friend to finish up a shot at another location. "All of a sudden, I looked up and saw this perspective," she says. "I immediately set up my tripod." Through her lens, she captured the furious energy of the horses and a sense of pride. She calls the photo *Freedom's Run*.

Part of a military family (her dad was a Marine, her husband was in the Army, and her daughter is in the Air Force), Gail's passion is Americana. During the three years she's worked on her monument series, Gail has had her moments of comedy (she's fallen off the Lincoln Memorial and convinced a White House guard to let her climb the back fence for a better angle) and managed to capture humanity (an embrace in silhouette by the Rainbow Pool at the World War II Memorial; grief beside the Vietnam Veteran's Memorial Wall). To view more of her work, visit *www.zenfolio.com/gvphotos* or *www.betterphoto.com/?gail*.

◀ **RUNNER UP:**
Marcus Brammer
Denton, TX

▼ **RUNNER UP:**
Angela F. Garcia
Quezon City, Metro Manila, Philippines

▲ **RUNNER UP:**
Eva Gryk
New Britain, CT

**RUNNER UP:** ▶
Geoffrey Ansel Agrons
Cape May, NJ

Panasonic
LUMIX®
DIGITAL CAMERAS

wishes to thank everyone who entered the *Popular Photography* 15th Annual Photo Contest and to congratulate the Grand Prize Winner and the category prize winners.

GRAND PRIZE

© Alex Braverman

TRAVEL/PLACES

© Gail Vitikacs

NATURE

© Robin Harrison

ARCHITECTURE

© Estelle Dougier

PEOPLE

© Dina Goldstein

CANDID/HUMOR

© Faisal Almalki

ACTION/SPORTS

© Danny Podkowa

Additional Sponsors:

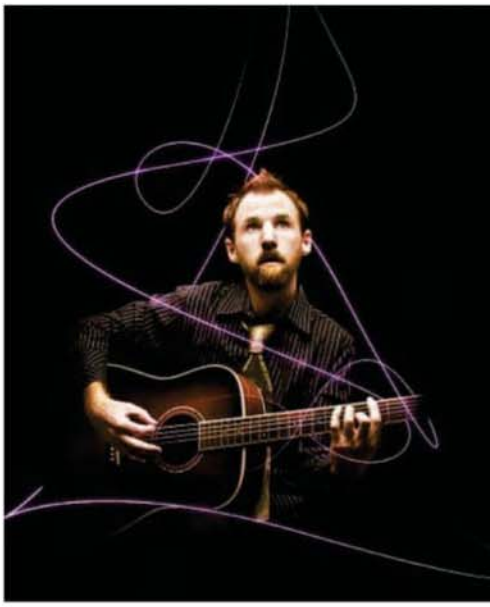
Special thanks to our Premier Sponsor:

Panasonic ideas for life

Text by Peter Kolonia
Photos by Stephen Poff

# MANYMe

## Want to learn lighting? Shoot yourself.



**In late 2006, Stephen Poff,** then 32 and a television producer from Montgomery, AL, was frustrated by what he *didn't* know about photography and lighting, so he challenged himself: Every day for a year, he would make a self portrait. Why self-portraits? "Because the model is always available, and he works for free," answers Poff.

Each portrait would have character and personality (not necessarily his own), and be radically different from the others. Each would tell a story. Each would also force him out of his comfort zone and teach him something new about photography, image editing, and/or lighting.

The portraits, which he uploaded to his Flickr page daily, were so successful that they have spun off their own Flickr group (www.flickr.com/groups/365days), now more than 10,000 members strong. Its devotees post podcasts and tutorials that help photographers around the world produce their own self-portraits.

Clever and entertaining, Poff's hundreds of portraits are also a *de facto* textbook on photography, image editing, and lighting. In detailed captions, he explains how he conceived and executed each image. These exemplify how lighting creates mood and suggests character, as well as flattens, expands, or otherwise sculpts space within a photo.

The creation of this "textbook" was itself an educational process. "When I first started, I was afraid of strobes," says Poff. "I was familiar with hot lights from my work in video, but hot lights weren't bright enough to stop action or to allow smaller apertures, so I put together a strobe kit with a single Canon 430EX shoe-mount Speedlite. I used it off-camera on a lightstand, and fired it with an inexpensive radio remote system I found on eBay."

### STEPHEN POFF'S TOP LIGHTING TIPS

- Get your flash off-camera.
- Light indirectly, by bouncing off large, white surfaces.
- You can get great results with inexpensive lights.

As Poff's inventory of lighting tools grew, so did his skills. He started by using flash from the Speedlite, diffused through or bounced off a cheap umbrella. Then he graduated to bouncing flash off walls and ceilings, and feathering its output to create subtle shading and shadows in the backgrounds.

Eventually he developed a more cinematic, three-point lighting techique that encompassed key, fill, and background lights. This added depth and gave objects more modeling and dimension.

"The fun started when I began mixing up my sources," he says. "Often the key light would be strobe, but the background or strong rim light would be my video hot lights. It's a great way to suggest that there's a world outside the frame of your picture, and just like the real world, it's lit by many different colors of light."

Finally, Poff mastered the art of using light to unify elements in image composites. "Controlling the direction, intensity, and color temperature of the lighting," he says, "was the easiest way to combine three or four images and have it appear to be a single take."

Want to try Poff's self-portrait route to learning lighting's fine points? Start by studying his results at www.flickr.com/photos/stephenpoff.

# digitaldays

## Hands-on photography workshops

**For more information call toll free 888-243-6464**

- Presented by the experts at *Popular Photography*
- Photo tips for any camera brand
- Improve your photographic technique
- Learn digital workflow
- Photograph live models

PHOENIX, AZ • DENVER, CO • LOS ANGELES, CA

Sponsored by

SONY

# Sign up today!

www.digitaldaysphoto.com

HOUSTON, TX • NASHVILLE, TN • BOSTON, MA

# SEEWorld

WILSON TSOI

# EARTH'S MOST EXOTIC SUBJECTS
## ARE CLOSER THAN YOU THINK
*BY PETER KOLONIA*

**Can't swing Cozumel** this winter? Consider a nearby destination that offers all the outlandishly colorful creatures of a Caribbean snorkel safari at a tiny fraction of the cost: a major aquarium. If you're like most Americans, you live within a 90-minute drive of one. And many include aviaries and plant habitats, as well.

Think you can't get good pictures there because it's too dark, too crowded, or too photographically challenging? We know three guys who disagree. They're staff photographers at some of the nation's most-visited aquariums, and each assures us that you can get great pictures of some of the planet's most amazing creatures with equipment you probably already own.

"First and foremost," says Bob Couey, visual services manager for SeaWorld, San Diego, "pack so your photo gear fits in a single bag. If you're carrying much more, and it appears that you're shooting commercially, security is likely to stop you."

When following fish across a large tank, it also helps to have all your stuff in a single shoulder bag. That way, you're not forced to leave expensive equipment at one end of the window as you chase your quarry toward the other.

What should go in that bag? Bruce Carlson, chief science officer of the Georgia Aquarium in Atlanta, answers, "You can't really shoot in an aquarium without an SLR and an off-camera flash. Leave the point-and-shoot at home. I also recommend an image-stabilized moderate tele zoom such as Canon's 17–85mm f/4–5.6

◀ **LESS CAN BE MORE:** Wilson Tsoi prefers smaller venues such as the Oregon Coast Aquarium in Newport, OR, which let him use a tripod with his Nikon D200 and 10–20mm f/4–5.6 Sigma lens for this shot. Besides sea life, he suggests focusing on architecture and, most of all, visitors.

# SEEWorld

▲**GET CLOSER:** For maximum sharpness, look for subjects near the aquarium glass. The less water between you and your subject, the sharper it can be. Joachim S. Müller shot this close-up at Loro Parque Aquarium on Tenerife with a Sony Cyber-shot DSC-F828.

IS—or faster, if you can afford it."

Because many exhibits are too dark to make sharp pictures of darting subjects, flash is often necessary. But take it off-camera. Otherwise, its output will bounce back from the reflective tank surface, causing underexposure and distracting hot spots in your images. Moreover, the harsh, direct light from an on-camera flash will visually flatten out and compress the shape of your subjects.

You've never used an off-camera TTL flash? This kind of lighting has never been easier. Choices include wired or wireless, radio or infrared, on a bracket or off. Most systems weigh little, are fully automated, and, if you choose wisely, don't cost much.

If you're working alone, an off-camera, side-arm extension bracket makes sense, but better and more varied pictures result if you simply ask a friend to hold (and aim) the remote flash for you. Visit your camera maker's website to explore off-camera flash options. If prices seem steep, search for radio remotes on eBay. (Radio signals don't travel well through water, however, so this option won't work if you put the light on the opposite side or above a tank.)

"Always bring a polarizing filter," says Carlson. "It won't help much eliminating reflections on glass or acrylic tank walls, but for open-top exhibits where you want to shoot through the water's surface, it will reduce or eliminate reflections."

George Grall of the National Aquarium in Baltimore also recommends a matte-black antireflection lens baffle. It's a rectangular foam-core panel up to 20x24 inches with a hole cut in the center for the lens. Shooting through one will eliminate tank reflections, especially for wide-angle shooting. The closer you are, the better it works.

Other useful gear: kneepads and a monopod. Tripods prevent you from chasing a moving subject and are often prohibited because they can trip up other visitors.

And watch out for those other visitors! Aquariums can get very crowded. "The best days of the week are usually Monday through Wednesday, and early in the morning, right after opening," says Bruce Carlson. "There are fewer people and the tank walls aren't smudged up yet." Most aquariums experience a downturn in attendance after Labor Day through early November, when school field trips start up again.

CLOCKWISE FROM TOP LEFT: RALF SCHULTHEISS/ZEFA/CORBIS; JOACHIM S. MÜLLER; MICHAEL GROSSMAN; MICHAELGROSSMANPHOTOGRAPHS.COM

◀**GO AUTO:** Aquarium lighting, especially in daylit, open-top tanks, often means shifting light levels and color temperatures, as well as mixed light sources. For shots like this one by Ralf Schultheiss, auto exposure and white balance settings are often best.

**SILLO SECRET:** The trick for silhouetting people against glass? Spotmeter the water beyond them. Michael Grossman shot this at the Monterey Bay (CA) Aquarium with a handheld Canon EOS 5D and 28–75mm f/2.8 Tamron lens; 1/60 sec at f/2.8, ISO 1600.

▲**LET THE SUN SHINE IN:** Plan your aquarium trips for bright, sunny days, which will better your chances for great pictures of sea life in open-top tanks. Christopher Chan captured this sunlit whale shark (and friends) at the Kaiyukan Aquarium in Osaka, Japan, with a Canon EOS 30D. He pressed his 10–22mm f/3.5–4.5 Canon zoom against the tank to minimize reflections and camera shake.

CHRISTOPHER CHAN

The best time of day? For exhibits with natural sunlight, visit in midday or early afternoon for great natural lighting. Different fish are active at different times throughout the day, so try to discover when your favorite subjects are at their most photogenic.

Shooting through glass or acrylic windows poses its own set of photographic challenges. "In fact," says Bruce Carlson, "exhibits with highly curved windows—bubble tanks, for example—typically distort so much that clear, sharp photos are impossible."

Acrylic windows are often very thick. "Our largest is 24 inches front to back," says Carlson, "but most windows average anywhere from 2 to 8 inches. You can't shoot through them at an angle without getting a lot of distortion and chromatic aberration. The trick is to shoot straight through the window to your subject at the tightest possible distance." But not too close. "Acrylic windows scratch very easily," he warns. "If you press a normal lens shade hard against one [to eliminate reflections], you can easily leave scratch marks. To prevent this, use only lens shades made of soft rubber."

High ISOs (800 or 1600) will allow you to shoot at the faster shutter speeds that freeze motion. (Most of these photographers use 1/125 sec or faster.) Shooting RAW will let you address white balance issues with greater flexibility later in software.

And software is your friend. More than any other type of nature photography, aquarium shooting almost *requires* digital touch ups. Air bubbles and floating debris in the water need to be cloned out. Noise reducers, such as Nik Software's Dfine 2.0, make shooting at ISO 1600 more viable, and sharpening can help bring back detail that thick tank windows begin to blur out.

## 10 TIPS OUT OF THE BLUE

- **Forget AF.** More often than not, autofocus latches onto smudges or scratches on the tank window, not on the creature within.
- **Slower is better.** Especially when you're just starting out, concentrate on slower-moving creatures, such as lion fish, jellyfish, and frogs. "When all else fails," says Bob Couey, "photograph the beautiful corals and anemones. They don't move at all!"
- **To clean tank walls,** bring a soft cloth.
- **Leave the kids at home.** You'll get better pictures without an entourage.
- **Fire freely**. When shooting fast-swimming fish, don't wait for decisive moments. Set the continuous drive mode and fire away until you, your camera, or the fish poops out.
- **Use high-speed sync.** Remember your flash's high-speed sync mode? It lets you use flash up to your camera's fastest shutter speed, and aquarium

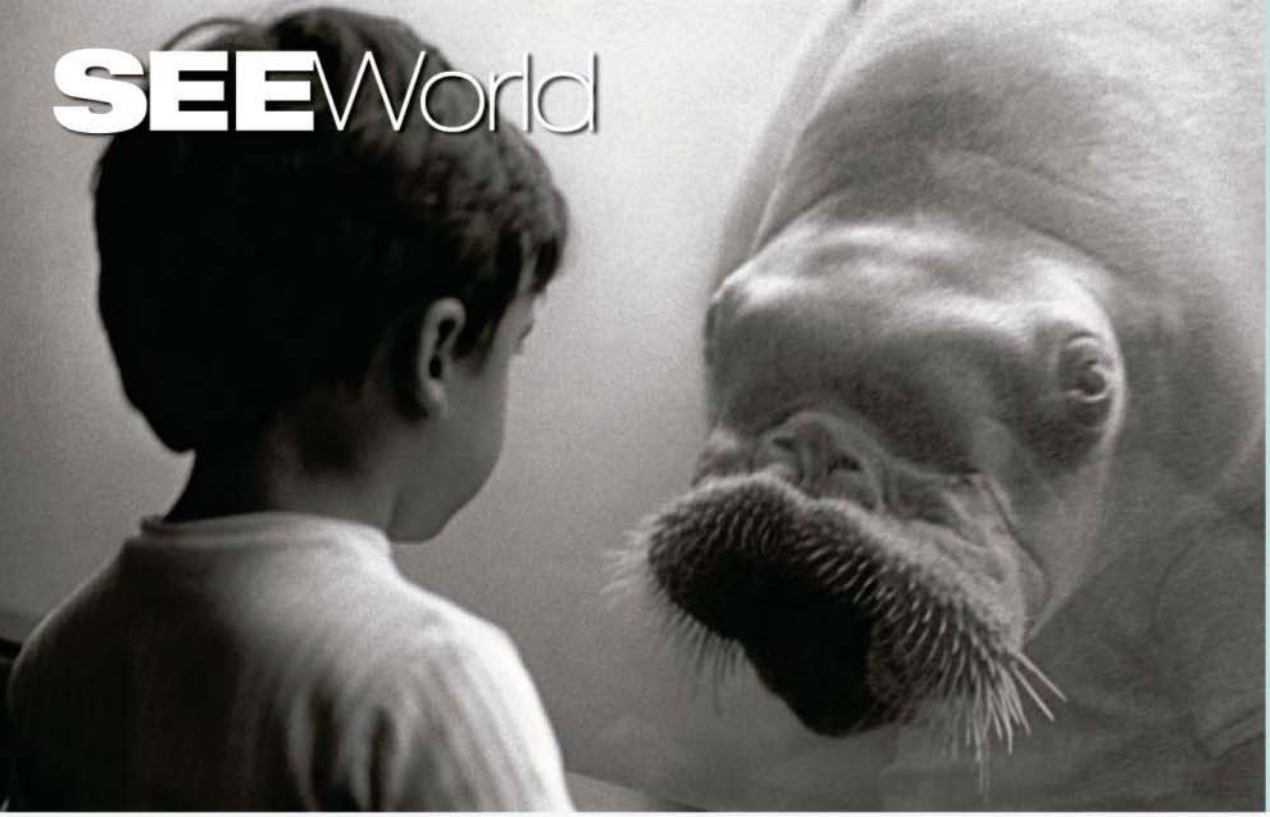
# New Portrait Professional 8 for Mac & PC.
# Ultra easy portrait touch-up software.
# See it to believe it. Free trial.

Portrait Professional 8 is new, incredibly easy to use portrait enhancement software. Offers complete creative control. Improve any aspect of your portraits instantly, just by moving sliders. Fast. Easy. Great results.

Don't take our word for it. Download the free trial for Mac & PC at www.PortraitProfessional.com and see for yourself. And from just $79.95 for the standard version, it knocks spots off the competition, as well as your subjects.

SPECIAL **10% EXTRA DISCOUNT** FOR POP PHOTO READERS IF YOU ENTER THE COUPON **RQ545** WHEN BUYING ONLINE.

## www.PortraitProfessional.com



**◀ CLOSE ENCOUNTER:** Aquariums make great settings for family portraiture: Capture the interaction between your children and the sea life. If your main goal is to photograph the creatures, though, better leave the kids at home. Beau Brashares shot this encounter at the New York Aquarium in Coney Island with a Nikon FE2 and 105mm f/2.8 Nikkor on Kodak Tri-X film.

BEAU BRASHARES, WWW.BRASHARES.COM

shooting is a perfect situation for it. It will capture fish sharply, even when the ambient light is bright enough to cause motion blur at normal sync speeds.

■**Use rear sync.** "Set your flash's rear-curtain sync mode to put motion blur behind your swimming subject, not in front of it," says George Grall.

■**Crop tight.** "Fill the frame with your colorful subjects," says Couey. "And if your DSLR offers it, dial up saturation to retain that color."

■**Don't waste time.** "No Flash" exhibits, super-fast-moving fish, and creatures behind scuffed glass are typical time-wasters. Move on.

■**Join up.** Aquariums are often very photo-friendly places. They link up with photo clubs and community colleges, and may even offer their own photo classes. Ask the membership office about opportunities such as special entry privileges, as well as lectures and tips from expert photographers.

The one recurring theme these pros stress: Patience and return visits are your best hope for killer aquarium photography. Don't expect miracles the first time out. But also don't doubt that, with patience and the right equipment, miracles will come.

## SeaforYourself 12 GREAT AQUARIUMS AROUND THE U.S.

**●ADVENTURE AQUARIUM, CAMDEN, NJ**
www.adventureaquarium.com
Shark lovers, this is your home base. One of only two aquariums in the U.S. to exhibit a great hammerhead shark, its 550,000-gallon Shark Realm includes more than 20. For $165, you can even snorkel among them.

**●AQUARIUM OF THE PACIFIC, LONG BEACH, CA**
www.aquariumofpacific.org
In addition to the three main galleries highlighting the major regions of the Pacific, there's a Shark Lagoon, as well as a Lorikeet Forest aviary with tropical birds and a waterfall.

**●DISCOVERY COVE, ORLANDO, FL**
www.discoverycove.com
Get a more hands-on, outdoors experience in the free-flight 250-bird aviary, the Shark Habitat, and the swim-in coral reef with 100 stingrays. Or take a dip with a bottlenose dolphin.

**●GEORGIA AQUARIUM, ATLANTA, GA**
www.georgiaaquarium.org
With more than 100,000 animals representing 500 species, the Georgia Aquarium offers myriad photo ops. It's also home to both cold-water belugas and whale sharks.

**●JOHN G. SHEDD AQUARIUM, CHICAGO, IL**
www.sheddaquarium.org
This long-established aquarium is packed with stunning modern features such as the Wild Reef, where sharks circle overhead and stingrays glide below the see-through floor.

**●MONTEREY BAY AQUARIUM, MONTEREY, CA**
www.montereybayaquarium.org The 28-foot high kelp forest at this converted cannery is home to wolf eels and sardines. This aquarium also houses one of the country's largest collection of jellies.

**●MOODY GARDENS, GALVESTON, TX**
www.moodygardens.com
Texas may be the last place you'd expect to find penguins, but you can check them out here along with seals and sharks. While you're there, visit the Rainforest Pyramid full of tropical plants and birds.

**●MYSTIC AQUARIUM, MYSTIC, CT**
www.mysticaquarium.org
Swim with a beluga whale, touch a cownose ray, learn how to care for a penguin, watch a sea lion show, or gaze at the fluorescent coral at this hidden gem.

**●NATIONAL AQUARIUM, BALTIMORE, MD**
www.aqua.org Come for the impressive reptiles, giant turtles, and rainbow variety of frogs. Stay for the giant Pacific octopus that instantly changes color and skin pattern.

**●OREGON COAST AQUARIUM, NEWPORT, OR**
www.aquarium.org Unlike the mega-aquariums, this friendly spot keeps it local. Fortunately, lots of compelling creatures live here, including turtles, sea otters, seals, sea lions, and an amazing variety of jellies.

**●SEAWORLD SAN DIEGO, SAN DIEGO, CA**
www.seaworld.com/sandiego For sheer variety, you can't beat this venue's Aquarium de la Mer, which offers macro-scaled seahorses, a giant Pacific octopus, and much in between. Trying to find Nemo? He's here; so is Shamu.

**●TENNESSEE AQUARIUM, CHATTANOOGA, TN**
www.tennis.org It's rare for an inland aquarium to be packed with this much wildlife—from penguins to crabs, jellies, sharks, eels, and even butterfiles and birds.

# Flash.

# Flashier.

## When it comes to your pictures, flashier is better.

Sure, your camera comes with a built-in flash, but it lacks the power to take great pictures in any situation. That's where the Quantaray XLF-50 xtra lite digital flash comes in, providing you with much more power. More power for you means greater flash range for your pictures and more versatility for your digital camera. With the XLF-50, you'll capture the shots you couldn't before. It's small and lightweight for portability, and at only $99 it's a must-have accessory for your digital camera. Its name is the Quantaray XLF-50. But we like to call it the flashier flash.

Compatible with Nikon and Canon digital SLR cameras.

Quantaray by Sunpak
XLF-50 xtra lite flash

The Ritz Camera Centers Family

WOLF CAMERA & IMAGE · KITS CAMERA & IMAGE · RITZ CAMERA & IMAGE · CAMERA & IMAGE · INKLEY'S CAMERA & IMAGE

David Ritz
Chairman, CEO

sunpak.com

# 5 SECRET WEAPONS INSIDE YOUR DSLR

## Your camera is more powerful than you think

By Dan Richards

**DIGITAL SLRS AREN'T** just picture-taking machines—they're mini processing labs. The picture controls in a typical consumer DSLR, in fact, can rival basic image-editing software in the ways they can improve and transform your pictures.

But you have to know how to use them.

Here are five of the most useful picture controls in current DSLRs and a short course on each, covering both the intended purpose and alternative uses that may surprise you.

Warning: Camera models—even ones from the same manufacturer—differ widely on the ways to access these

**1 KELVIN WHITE BALANCE:** Marc Adamus used a WB of 6900 K to maintain blues in this warm-hued scene (left), taken with a Canon EOS-1Ds Mark III and 16–35mm f/2.8L Canon EF lens. With a color temp of 12,500 K applied (right), it goes extremely warm.

controls. They may be found on buttons, in menus, and occasionally on dials, so consult your instruction manual. Dog ate your manual? Go to the camera manufacturer's website—almost all of them provide free downloads in PDF format.

## 1 KELVIN WHITE BALANCE

***Imagine a continuously variable cooling/warming filter that can go from icy blue to warm orange with the spin of a dial. Your camera very likely has one built in.***

The majority of DSLRs sold today have white balance that can be set in Kelvin degrees, a measurement of the tone of the light. Go into the white balance (WB) menu of your camera and choose the Kelvin or K setting. Setting the Kelvin temperature to a low number (2500–3500 degrees is low on this scale) will push your pictures toward blue. Setting a high number (8000–10,000) will shift the color toward amber.

**■TECH NOTE 1:** This can be confusing, as the Kelvin *settings* on a camera counter the Kelvin *readings* made by a color meter. The camera settings act as filters to compensate for the color temperature of the scene—you need blue filtration to take out the yellow of incandescent lighting, for example, and amber filtration to counteract the blue in the shadows of a clear winter day.

**■TECH NOTE 2:** The most extreme effects result from going completely the "wrong" way with Kelvin settings. Take a picture lit by incandescent or firelight with your camera set to 10,000 K, and it will be a study in deep reds. Shoot a landscape on a misty, rainy day at 2500 K, and you'll get the iciest blue you ever saw.

**■TECH NOTE 3:** Most cameras that have Kelvin adjustments also have adjustments along the green-magenta color axis. You can do really weird stuff with this one, but there's a practical application: Nudge it toward magenta to fine-tune color balance under fluorescent lights.

## 2 AUTO-BRACKETING

***OK, you're not a RAW kind of person and you don't want to twiddle with picture adjustments after the fact. But you also want to get the exposure just right. It's time to make friends with autobracketing.***

Every DSLR has this feature, which automates the process of taking a series of images at different exposures, usually an underexposure and an overexposure bracketing the "correct" exposure. You can set it to take the brackets at different gaps—a third-stop (0.3 EV), half-stop (0.5 EV), whole stop (1 EV), and so on. Some cameras cater to the truly nervous by letting you take a five-shot bracket. And as the camera can shoot them in a burst, the process takes only a second or two longer than making a single exposure.

The control is usually found on a drive mode button or menu option. You set the gap you want, and the number of shots to make. Some cameras let you vary the order of the shots—from highest to lowest exposure, or starting with the correct exposure, and so on.

Don't get hung up on the notion that autobracketing is a kind of doofus-proofing. Plenty of very experienced photographers routinely bracket exposures, not necessarily to prevent mistakes but to get a range of renditions. Several of the brackets can turn out to be "right" exposures. You may prefer slight underexposure, for example, because it intensifies

MARC ADAMUS, WILDPHOTO.SMUGMUG.COM

**4 JPEG PROFILES:** We shot these flowers with a Nikon D700 and 60mm f/2.8G AF-S Micro-Nikkor lens, with the JPEG profile set to Neutral (left half). Then we applied the Vivid profile to the RAW file during processing and added more saturation (right half). *Pow!*

color saturation. And a picture exposed above the meter reading may have a nice high-key effect.

**■TECH NOTE 1:** How the brackets are made depends on which autoexposure mode you're using. With shutter-priority set, the camera will change the aperture to make the various exposures. Switch to aperture-priority, and the camera will hold your aperture setting and vary the shutter speed up and down. Keep this in mind if you want to maintain a certain aperture for depth of field, or a certain shutter speed for motion freezing or blurring.

**■TECH NOTE 2:** You can make "one-way" brackets, too—a sequence only in the direction of overexposure or underexposure. Set the autobracket first, with the number and gap you want. Then go to exposure compensation (often a button) and shift the exposure up or down to move the bracket in the direction you want. Most cameras show you the exposures along an exposure index bar (as shown here).

Why would you do this? Because you're taking a picture that you know should turn out dark (a city scene at night) or light (a sunny day after a snowstorm).

**■TECH NOTE 3:** You can use a set of widely spaced exposure brackets to make a high-dynamic-range (HDR) photo. See www.PopPhoto.com for a lot of help in doing this.

## 3 POP-UP FLASH COMPENSATION

***Want to guarantee that outdoor portraits, even those taken in tough light, will make both you and your subject look good? You don't need any extra accessories to do it.***

The pop-up flash is your secret here, but you have to take it off its default (very point-and-shooty) mode. First, go to the flash mode control and set it to fill-flash, also called forced flash. Usually this is a lightning bolt icon, sometimes paired with the word "fill." This mode makes the flash fire even in bright daylight, with the correct ambient exposure.

Next, set the forbiddingly named flash-exposure compensation control to –1.3 EV or thereabouts. Now leave those settings alone. If you don't want the flash to fire, just snap the flash down—it will stay down in any standard exposure mode except auto.

This setting will produce a light kiss of flash in portraits—just enough to open up shadows, but not enough to look obviously flashed. It works in backlight, sidelight, and harsh overhead sunlight. And it works on nonhuman subjects—try it with foreground flowers or a black cat whose face sometimes turns into a bleak shadow in daylight pics.

**■TECH NOTE 1:** Although pop-ups are notorious for producing redeye, this is much less likely in daylight, when people's irises are stopped down for a smaller target pupil.

**■TECH NOTE 2:** Portraits look best with shallow depth of field, so keep your ISO low to allow you to shoot at a wide aperture.

## 4 JPEG PROFILES

***While you're sitting in front of the computer adding (or reducing) saturation, or increasing (or decreasing) sharpness, maybe you're wondering why you can't just do that in-camera. You can!***

**5 DYNAMIC RANGE EXPANSION:** We turned off the Sony Alpha 700's Dynamic Range Optimizer for this shot, taken with a 16–80mm f/3.5–4.5 Zeiss Vario-Sonnar DT lens. The shadows were murky, so we set Advanced DRO to +5, which opened up the details.

Every camera maker has its own term for JPEG profiles (Canon, Picture Style; Fujifilm, Film Simulation; Nikon, Picture Control Optimization; Olympus, Picture Mode; Pentax, Custom Image; Samsung, Picture Wizard; Sigma, Image Parameter; Sony, Creative Style). These let you set a specific profile (contrast, color saturation, sharpness, and sometimes skin tone) for JPEG capture. You'll find them in menus, but sometimes there's a button to bring up the selection.

You can use preset profiles (such as Neutral, Portrait, Vivid, etc.) or a custom profile of your own making. Within presets you can also tweak individual parameters. Want that over-the-top Fujifilm Velvia look? Set the most saturated JPEG profile (it's often called Vivid), push the contrast up one notch, boost the saturation up as high as it will go, and bring down the sharpness one notch.

**■TECH NOTE 1:** Keep in mind that a JPEG gives you limited leeway for further adjustments later in an image-editing program. But if you opt to shoot RAW files, you can apply a profile when you convert the RAW file to a JPEG using the camera manufacturer's conversion software. It's sometimes a matter of one click, and you can try a variety of styles for the same picture.

**■TECH NOTE 2:** Most current Nikon, Olympus, Pentax, and Samsung DSLRs let you apply a JPEG profile (as well as other adjustments) when you convert a RAW file in-camera.

## 5 DYNAMIC RANGE EXPANSION

***Oh, those contrasty scenes—if you expose for the shadows, the highlights get blown out. And vice versa. Why can't a camera stretch this dynamic range? Chances are yours can.***

Most DSLRs have a control for expanding dynamic range, and as with JPEG profiles, every maker uses a different name (Canon, Highlight Tone Priority; Fujifilm, D-Range; Nikon, D-Lighting; Olympus, Shadow Adjustment Technology; Pentax and Samsung, HDR Filter; Sony, Dynamic Range Optimizer).

This can be a single setting with no adjustment, an adjustable setting, or a setting that adjusts automatically according to the lighting. Some models apply the effect on the fly; others allow you to apply it after the shot. Look for the setting in the menus.

**■TECH NOTE 1:** As in life, there is no free lunch here. Pushing up detail in the shadows can also boost noise, especially at high ISOs. So keep the ISO as low as possible when increasing dynamic range. (Some cameras limit the ISO range when you use expanded dynamic range.)

Also, the exposure may appear to change when you apply a DR boost—some cameras may increase overall exposure while maintaining a highlight tone, others may decrease the exposure while holding shadow area constant. You may want to fine-tune exposures with an autobracket.

**■TECH NOTE 2:** As with JPEG profiles, you can apply dynamic-range controls during RAW conversion using the camera maker's software. This is the better method if you think you might want to change the look of your photos in the future—a JPEG gives you much less flexibility.

Learn from the Experts!

# POPULAR Photography

## Workshops

### Learn the Basics

*Inspiration, fun, cool things you can do with Photography*

Saturday, 1:00-5:00pm

- JPEG vs RAW
- Shooting Modes/ISO/Exposure
- Taking Better Pictures
- Using the Computer
- Printing & Sharing

### Beyond the Basics

*How to make great pictures, and what to do with them*

Sunday, 9:00-5:00pm

- Live Model Shoot
- Digital Workflow
- Advanced Editing
- Output

PHOENIX, AZ // DENVER, CO // LOS ANGELES, CA

HOUSTON, TX // NASHVILLE, TN // BOSTON, MA

Credits (top to bottom): Eric Gevaert (2), Chris Howey, Nick Carver Photography, Daniel Stein, Kmitu

## Sign up today!

www.digitaldaysphoto.com • 888-647-2235

Men & women photographers—what's the real difference?

*By Kerrie Mitchell*

# The Sex Factor

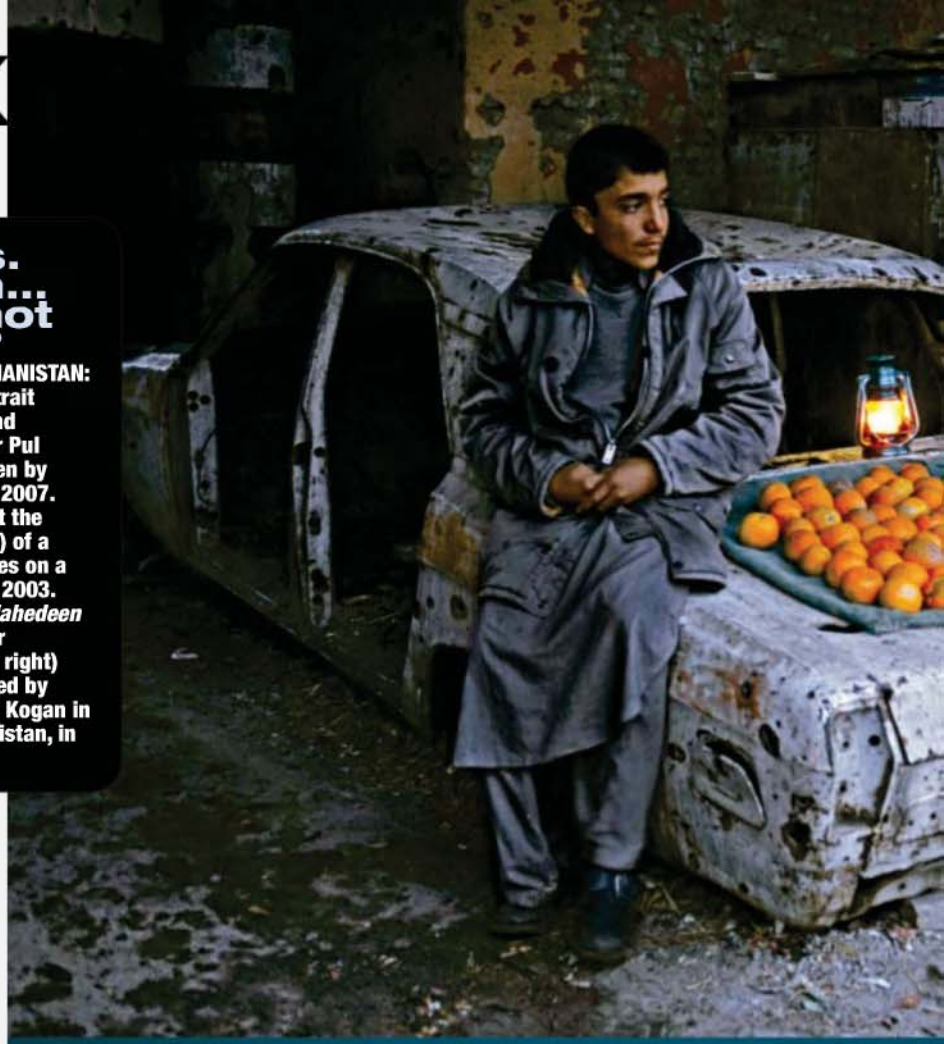
Can you tell who took this photo? Turn the page and find out...

**AT THE INTERNATIONAL CENTER** of Photography in New York last year, Associate Curator Kristen Lubben found herself talking a lot about a timeless subject: the differences between men and women. She was co-curating part of an exhibit of photos of the Spanish Civil War by Robert Capa and Gerda Taro. The two had been lovers and professional partners at that early point in their careers. While Capa went on to become one of the 20th century's most renowned war photographers, Taro died in 1937 at age 26, after being struck by a tank.

# The Sex Factor

## Men Vs. Women... Who shot which?

**CONFLICT IN AFGHANISTAN: This intimate portrait (previous page and left) of coal miner Pul i Khumri was taken by Steve McCurry in 2007. McCurry also shot the portrait (top right) of a boy selling oranges on a street in Kabul in 2003. Villagers and *mujahedeen* fighters with their weapons (bottom right) were photographed by Deborah Copaken Kogan in Sanglakh, Afghanistan, in February 1989.**



PAGE 73: STEVE MCCURRY. THIS PAGE, CLOCKWISE FROM TOP LEFT: STEVE MCCURRY (2); DEBORAH COPAKEN/CONTACT PRESS IMAGES

"We had Taro upstairs and Capa downstairs," says Lubben. "It was an interesting test case for some people—do men and women take different pictures? As I gave tours of the exhibition, I was constantly asked about it."

Such fascination makes sense. Gender is an endlessly debatable topic. The debate gets fiercer when it turns to boys-versus-girls. And the stakes get higher as more women take up cameras.

Of course, women have always been a force in photography. Yet in recent years, photo programs have seen a steady rise in the number of female students in everything from advertising to art to photojournalism. At top schools such as the Rochester Institute of Technology and the Art Center College of Design in Pasadena, women now outnumber men. But do they take different kinds of pictures?

"The perception of what you're asking is: Who makes better pictures?" says Dennis Keeley, chair of photography and imaging at the Art Center. "Nobody. Better pictures are made by better photographers. That is not gender-driven, except we have a society that's gender-divided. In discussing these things, it's not the answers—it's the questions."

### The eyes have it

Our first question: Do men and women *physically* see the world differently?

There is some evidence that the answer might be yes.

A report from the *Online Journalism Review* made a splash in March 2007 when it reported an eye-tracking study that looked at where viewers glanced on a given news page on the web. When presented with an image of a figure, females most often looked at the face, while males focused both on the face and the crotch.

Funny enough for salacious blog posts, but the results may have been onto some serious differences in behavior. In 2000, *Life Sciences* published a Japanese eye-tracking study that found a marked difference between the gaze of adult men and women. When presented with an image, women looked for longer periods of time at fewer places, while men's eyes moved more frequently over the image.

Such intriguing results lend themselves to a host of ideas about detail-oriented women lingering patiently over a scene while stimuli-driven men scan it (seeking crotches?) like photographic Terminators.

The problem with such conclusions, though, is that they're based more on our own preconceptions about sex than on actual evidence. Laurent Itti, associate professor of computer science, psychology, and neuroscience at University of Southern California, notes that, while differences in visual behavior have been demonstrated in other studies, science hasn't proven what happens physically that creates such differences. "It doesn't tell you what's happening in the head," he says. "It doesn't tell you why."

## Venus and Mars

Until researchers uncover all the mysteries of the male and female brain, we're left to our own, decidedly unscientific, observations.

Keeley sees differences in his students' approaches. "Women—these are generalities—are much more flexible in terms of their imagery. They're able to appropriate images easier." His male students, though, often take a technical view, saying, "'How much equipment can I leverage at this thing? I can light it, frame it, I'll use the big camera, the big lens.'"

Reid Callanan, director of the Santa Fe Workshops, sees more women than men drawn to fine-art photography. "That's a realm of emotion and memory. Those parts of ourselves are more easily accessible by women," he says. "I think women are more self-aware than we men are."

And Kathleen Hennessy, director of photography at the *San Francisco Chronicle*, laughs as she recalls a conference at which she was in a group with two male editors: "I started to notice that the men really talked about the physical dimensions of the photograph, the technical aspects, and the composition. One used the word 'geometry' all the time, which I'd never heard before. And the women tended to talk about the story and the emotion and the impact. I thought, *Well, that's the difference between men and women, isn't it?*"

This was a common theme in our interviews. But while it seems like just another chapter in the *Men are from Mars, Women are from Venus* saga, it does get to a larger point. "As you progress through your photographic career and experience, you learn that oftentimes you photograph from your dreams and your memories and your intuition and your background," says Callanan. "It's not just the perception through your eyes."

So, not even the most thorough eye-tracking study could explain the vast motivations and personal background each photographer brings to a scene. Our pictures are inextricably bound up with who we are and how we move through the world. If you believe that men and women *experience* the world differently, then it follows that they take different kinds of pictures.

## Firing line

In search of differences, and similarities, in experience, we looked at a genre long dominated by men: war photography. It isn't long before familiar ideas about gender emerge.

Veteran conflict photographer and famed *National Geographic* shooter Steve McCurry, for one, doesn't think that men and women take different kinds of photos. Yet, he says, "I think the whole macho, act of aggression and war is more of a male thing—I think men are more drawn to going out and playing cowboys and Indians."

Deborah Copaken Kogan, a war photographer in the late '80s and early '90s who wrote the 2000 memoir *Shutterbabe: Adventures in Love and War*, has changed her mind about the role gender played in her work. "While

## Men Vs. Women... Who shot which?

**NEW YORK CITY: Children play with pieces of a broken mirror (top) from a car abandoned on Dodworth Street, Brooklyn, in 1999, where Brenda Ann Kenneally photographed the life of her block. In a shantytown in 1986 (bottom), Fred—just returned from prison—cries as he greets former girlfriend Rose. Eugene Richards included this photo in his 1987 book, *Below the Line: Living Poor in America*.**

BRENDA ANN KENNEALLY (TOP); EUGENE RICHARDS (BOTTOM)

I was taking the photos, I didn't think I had a female take on war. I thought I was taking the same pictures as the guy standing next to me."

But, having recently assembled presentations of her photos, she says, "When I put together my slide carousel, I noticed that they were, for lack of a better word, female. Meaning a lot of what I was fascinated by in war were the children, the women: How does war affect family life? How does war affect the psyche of a child?"

Still, even in a hyper-male environment like combat, traditional ideas of what subjects men and women are drawn to don't tell the whole story. "With Gerda Taro, there's a tendency to say, 'Oh, well, she took great pictures of women and children. Or she was particularly interested in taking pictures of orphanages,'" Lubben says. "I was asked over and over, 'Was she more sensitive? Did she care more about civilian victims? Was she less likely to be in the thick of battle?' There's a presumption that she took more feminine pictures, which I don't think is borne out by the work."

Such assumptions imply that women don't photograph something as dangerous as a battle or that "female" subjects such as women and children count less in war coverage.

But Capa and Taro both took pictures of civilians. And Lubben notes that Taro made a series of morgue photos that are more brutal than any she could recall of Capa's.

"I'm not saying there aren't differences between male and female photographers," she adds. "But I think we need to examine why we imagine there might be, and what attributes we're all too inclined to ascribe to female photographers even before looking at the work."

For all the talk of "male" and "female" subjects and approaches, most of the photographers we spoke with see little difference in the kinds of pictures men and women take. More importantly, for each stereotype, plenty of photographers defy it.

### Gender-neutral

Pulitzer-Prize winning *San Francisco Chronicle* photojournalist Deanne Fitzmaurice says that, whether you're a man or a woman, you need a certain set of traits—such as compassion, patience, and perseverance—to build a relationship with a subject and craft a long-term story.

"Who are the people who are doing that really successfully? Two who come to mind are Brenda Ann Kenneally and Eugene Richards," she says. "There's a female and male photographer who are using those skills and personality traits to get the stories they're getting."

Photographer Cara Phillips, co-creator of the online exhibition project Women in Photography (www.wipnyc.org), recalls her own education as a perfect example of stereotypes upended. "I studied with Joel Sternfeld—he's super-conceptual and intellectual, but he approaches everything from an emotional point of view," she says. "He didn't believe in taking pictures unless it really, really, *really* mattered. We never really bothered with the technical. He just expected you to understand what a good picture was and to find your way."

# Want to Play in the Dirt? Get a Different Lens Filter.

## New Tiffen Digital HT™ Filters Deliver Superior Performance

Now there's a line of high performance lens filters that's as tough as all outdoors. New Multi-Coated Tiffen Digital HT-Trans™ filters combine Academy Award winning ColorCore® technology and outstanding optics for superior performance with remarkable scratch resistance, worry-free cleaning, and rugged durability.* They can make all the difference when you're shooting in dusty, dirty or any environments.

Our Digital HT filters, with Anti-Reflective and High Transmission characteristics, transmit nearly 99% of light. And with a low-profile titanium finish ring and anti-reflective black locking ring, you have a precision lens filter that's built to last.**

Want to know where you can get your hands on the tough Tiffen Digital HT Filters with ColorCore® technology? Visit tiffen.com today. And start making plans to go play in the dirt.

**TIFFEN®**

***The Difference is Tiffen***

1-800-645-2522 • tiffen.com

***TIFFEN DIGITAL HT FILTERS:***

***REVOLUTIONARY BREAKTHROUGH IN LENS TECHNOLOGY***

*Digital HT Trans Filters surpasses military specifications based on testing by the Rochester Institute of Technology **Ten-year warranty on any manufacturing defects.

**Digital HT Filters are available from these and other fine dealers:**

**Adorama.com • amazon.com • Bhphotovideo.com • henrys.com • jr.com • samys.com**

# The Sex Factor

Pamela Reed and Matthew Rader are a team of art and fashion photographers based in New York. They don't believe there's much difference in their individual pictures. In fact, Reed says flatly, "When we get back our photos, you can't tell which photos Matthew took or I took."

## Subjective reality

But pictures aren't taken in a vacuum. The sex of the photographer matters because subjects react to men and women differently. This doesn't have anything to do with how the photographer perceives the scene, but it can still have a huge effect on the resulting photograph.

Indeed, Reed points out that female models generally perform differently in front of male photographers than they do in front of female ones. However, the models who work with Reed and Rader are faced with a team that includes both. "I don't think they know how to respond to that or which role they should play then," she says.

Adds Rader, "Perhaps that's why we see our work as asexual, because it gets canceled out."

Their experience with models underscores the subtle interplay between men and women, photographer and subject. But sometimes there's nothing subtle about it. The photographer's gender can be a huge hindrance or help in dealing with people, depending on the situation. And it can absolutely affect the kinds of subjects to whom he or she has access.

Deborah Copaken Kogan recalls assignments in Afghanistan where being a woman "hindered 200 percent" her ability to photograph the *mujahedeen*. "These guys were radical Muslims, and just the idea of having a woman along with them was totally antithetical to their way of being," she says. On the flip side, though, she could often go where male photographers weren't allowed—into homes and refugee camps to photograph women and families.

So do female photographers take pictures of women and children because they are inherently drawn to them as subjects? Or is it because they have better access to them to begin with?

**Men Vs. Women... Who shot which?**

**WAR IN EUROPE: Covering the Spanish Civil War in 1937 (top), Gerda Taro photographed two Republican soldiers carrying another in the Navacerrada Pass. Having landed in France with American forces on D-Day in June 1944, Robert Capa photographed captured German soldiers (bottom) in Calvados, St. Laurent-sur-Mer.**

GERDA TARO, INTERNATIONAL CENTER OF PHOTOGRAPHY/MAGNUM PHOTOS (TOP); ROBERT CAPA, CORNELL CAPA/MAGNUM PHOTOS (BOTTOM)

## Viva la différence!

We're not saying that the gender of the photographer doesn't play into the picture that emerges. Obviously it does. But it matters in ways that often we can't predict.

A tapestry of actions and reactions go into the making of a photo. To reduce it to any one thing, even if that thing may be the photographer's gender, is often just, well, a reduction.

Are women more drawn to narrative and emotion? Maybe, but plenty of men are, too. Are men more drawn to technical, action-centered subjects? Possibly. But for each stereotype, you can come up with examples of photographers who defy them.

"There certainly is a clichéd female style of photography. And there's a clichéd tech dude who has 2,700 cameras and only talks about depth of field," says Cara Phillips. "But within photography, there are so many people that fit and defy stereotypes, that going there doesn't get you anywhere. Ultimately I really don't think that it's important."

After all, in the end the goal is simply to make a unique, effective—even great—photograph. Says Dennis Keeley, "Photography has that quality of honesty in it that doesn't quit. And it goes beyond the maker of the picture."

COMPUTER SHOPPER SHOPPERS' CHOICE 2007

WINNER 4 YEARS IN A ROW!
BEST PLACE TO BUY
- ONLINE
- SOFTWARE
- PERIPHERALS
- CORE COMPONENTS

Canon
**EOS 50D 15.1 MP**
3.0" LCD, 22.3mm x 14.9mm CMOS, w/ 28-135mm f3.5-5.6 IS
Search Newegg: 30-120-300

**FREE***
4GB SD Card & Camera Case
*with purchase of select Cameras

Canon
**PowerShot SD990 IS 14.7 MP**
2.5" LCD, 3.7x Optical Zoom, 4x Digital Zoom,
Search Newegg: 30-120-283

Canon
**PowerShot SD1100 IS 8.0 MP**
2.5" LCD, 3x Optical Zoom, 4x Digital Zoom,
Search Newegg: 30-120-251

Canon
**PowerShot E1 10.0 MP**
2.5" LCD, 4x Optical Zoom, 4x Digital Zoom,
Search Newegg: 30-120-288

# POINT. SHOOT. SMILE.

TAKE STUNNING PHOTOS WITH THE CAMERA OF YOUR DREAMS, AND SMILE KNOWING YOU GOT IT FOR LESS AT NEWEGG.COM.
SHOP OUR HUGE SELECTION OF DIGITAL CAMERAS AND MORE TODAY AT WWW.NEWEGG.COM!

DIGITAL CAMERAS | CAMCORDERS | PRINTERS | LAPTOPS | SOFTWARE | ACCESSORIES

WE HAVE WHAT YOU NEED
**PRICE • SERVICE • SELECTION**

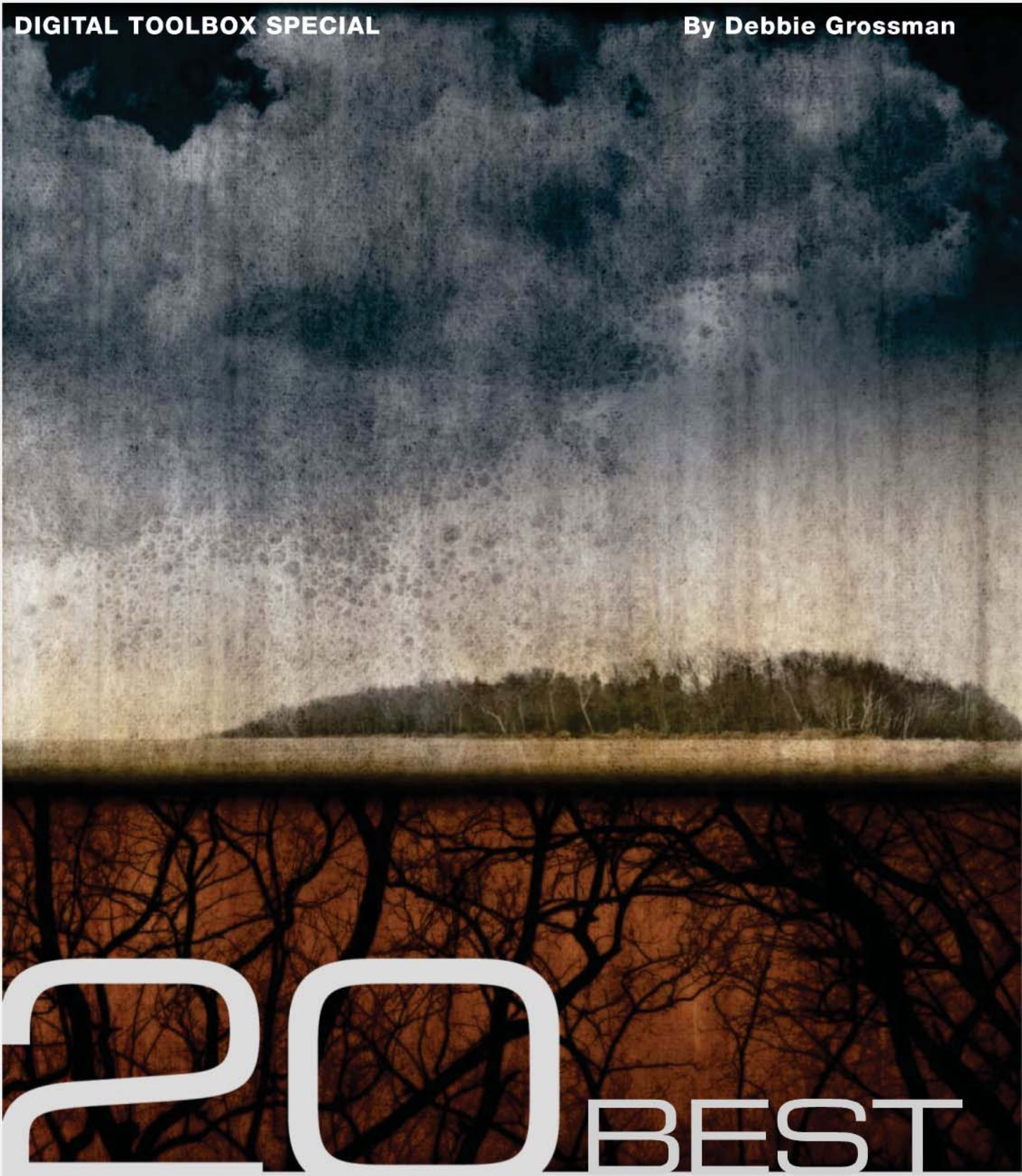
**NO PAYMENTS FOR 6 MONTHS** with your *Newegg.com* Preferred Account*
See website for more information. Promotion ends 01/31/09

newegg.com®
ONCE YOU KNOW, YOU NEWEGG.®

©2000-2009 Newegg Inc. All rights reserved. *See Newegg.com website for more information on promotion end dates for the Newegg.com Preferred Account.

DIGITAL TOOLBOX SPECIAL

By Debbie Grossman



# 20 BEST PHOTOSHOP TIPS

## WORK BETTER AND FASTER, WITH SECRETS FROM ADOBE PHOTOSHOP SUPERSTARS

## •SHIFT FOR ACCURACY

When you want to keep things straight or constant, use the Shift key. Hold it down when you're painting a line to draw perfectly straight. Press it when drawing a shape with the rectangular or elliptical Marquee tool, and you'll get exact squares or circles. To transform an object but maintain its proportions, hold down Shift. And when you're dropping one image onto another, Shift will place it directly in the center.

## •FIX BLOW-OUTS

Your highlights are unrecoverable, but you still like the picture? Keep them from looking like holes in your image by ensuring they don't print paper-white. Hit Ctrl (Command) + L to get into the Levels dialogue. Then, under Output levels, simply change the white value to 245 from 255.

## •FADE A FIX

If you want to see slightly less of the change you just made, but you don't want to lower the opacity of the whole layer, fade it. Go to Edit > Fade to reduce the amount of only your last action.

## •COOL DOUBLE EXPOSURE

Like the double-exposure effect? Messing with opacity is for amateurs. Instead, drag one image on top of another, then switch the top layer's Blend Mode to Screen. For a darker version, try Multiply.

# JULIEANNE KOST

**DIGITAL IMAGING EVANGELIST, ADOBE SYSTEMS INC.**

## •FAST SELECTIVE COLOR

First, make a new Black and White Adjustment Layer. Though the image appears to change to grayscale, the new layer hides the color in the original layer(s) below. Click on the mask, then paint on your image with black. This lets you hide the adjustment, revealing the color underneath. Continue painting with black until you've uncovered all the areas you want in color. Painting with gray will also hide or reveal more or less color below.

## •QUICK-CHANGE BRUSHES

My favorite shortcut in Photoshop CS4: dragging and resizing cursors. With a painting tool (such as the Brush) selected, hold down Alt and right-click (Control + Option on a Mac) while dragging your mouse left or right to increase or reduce the brush size. To change the hardness, hold down Shift + Alt and right-click (on Mac add the Command button). You have to release the mouse and drag again to switch between changing the hardness and the brush size.

*The author of* Window Seat: The Art of Digital Photography and Creative Thinking *and the creator of the Adobe Photoshop CS training DVDs published by Software Cinema, Kost shares more tips at jkost.com.*

# TIM GREY

**INDEPENDENT DIGITAL PHOTOGRAPHY AND IMAGING TEACHER AND AUTHOR**

## •COLOR FROM ANYWHERE

When you want to use a color for text or, say, painting in your image, you can click on the foreground color swatch near the bottom of the Tools palette to bring up the Color Picker dialog box, then click within your image to select a color from the image.

You can also select a color from anything else visible on your monitor—other images, dialog boxes, even the desktop. With the Color Picker dialog box open, click in an open image and keep the mouse button down while dragging across your display. The Color Picker will reflect the color under your mouse as you move it. When you release the button, whatever color it's on will be selected.

*Author of more than a dozen books on digital imaging, Grey is a member of the Photoshop World Dream Team of instructors and publishes the* Digital Darkroom Quarterly *newsletter. Find him at www.timgrey.com.*

## •RESIZE SMART

The Image Size dialogue gives you choices for resizing—so don't just leave it on the default setting. Under Resample Image, choose Bicubic Smoother for enlargements or Bicubic Sharper for reductions. Resizing a graphic image with lots of hard-edged shapes? Don't use Bicubic—instead choose Nearest Neighbor.

## •COMBINE YOUR LAYERS

When you do a lot of retouching, layers can really pile up. When you need to see all your fixes on one layer, but don't want to flatten, highlight the top layer. Select All, then hit Ctrl (Command) + Shift + C to copy, then Ctrl (Command) + Shift + V to make a new layer that shows how the image looks when everything is merged.

## •SEE THE WHOLE IMAGE

To fit the whole picture on screen, hit the Tab key to hide your panels. Then hit Ctrl (Command) + 0 on your keyboard to make your image as big as it can get. If you'd rather use your mouse, double-click on the hand tool for a full-screen view. For a black border, type the F key repeatedly.

## •FIX CONTRASTY IMAGES

If you're dealing with a good image that has a little too much contrast, use the Shadow/Highlight tool to quickly mellow it out. Just increase the tone using the Amount sliders for both shadows and highlights.

JULIEANNE KOST (OPENING IMAGE)

# KATRIN EISMANN

**CHAIR, MASTER OF PROFESSIONAL STUDIES IN DIGITAL PHOTOGRAPHY SCHOOL OF VISUAL ARTS**

## •BETTER CONTRAST

Whenever you use Curves to enhance contrast on a color image, make sure to set the layer Blend Mode to Luminosity. You'll avoid undesired shifts in color and saturation.

## •SUPER-SOFT SKIN

To subtly soften skin, duplicate the Background Layer and choose Filter > Other > Highpass. Use a radius of 5 pixels. Select Image > Adjustments > Desaturate and change the Layer Blend Mode to Softlight. This will sharpen the entire image. Now choose Image > Adjustments > Invert to add a wonderful softness to the image. Use a layer mask to control the effect's location.

*Besides teaching at New York's School of Visual Arts (www.sva.edu/digitalphoto), Eismann has written many books, including, most recently,* The Creative Digital Darkroom *with Sean Duggan.*

BOB DUKE

## •REPAIR RIGHT

If you have cloning and healing to do, don't mess up the layers you've already finished. Instead, make a new layer, and grab the Healing Brush or the Clone Stamp. From the pulldown menus in the Options Bar, pick Sample: Current and Below or Sample All Layers (depending on your version of Photoshop). All your new brush strokes will hover in your new layer.

## •QUICK BLACK-AND-WHITE

For a dramatic b&w, try using just one channel. To find the best, hold down the Ctrl (Command) key and type the numbers 1, 2, and 3 successively to see the Red, Green, and Blue channels. Like one the best? Go into Channel Mixer and set that one to 100%. Leave the other two at zero, check monochrome, and click OK.

## •GET GREAT EYES

For a portrait that pops, use the Lasso, set slightly feathered, to select the eyes. Hit Ctrl (Command) + J to copy them to a new layer and use Levels or Curves to add a touch more contrast to them. Then sharpen them slightly with Smart Sharpen. If the effect is too much, drag down the layer's opacity.

## •FIX COLOR RIGHT

When your color is bad but you don't know how to improve it, go to Image > Adjustments > Variations and check out previews of your image with different color casts. When you have a sense of what looks best, head to Curves to do the job right.

## •SEE YOUR TYPE

When you're adding text to a photo, you often need to adjust the type size, font, and color. But highlighting it can get annoying when you're trying to see the final product. To hide the highlighting, hit Ctrl (Command) + H. The text will still be selected, but you can make your changes much more easily. The same command, by the way, works to hide the "marching ants" that indicate a selected area.

# DEKE MCCLELLAND

**CREATOR, ONE-ON-ONE BOOK SERIES**

## •PRINT-SIZE SECRET

My favorite new feature of Photoshop CS4 is great for judging how your image will look in print, and it's particularly useful for gauging sharpening. Look at your display settings to determine the width of your screen in pixels. Using a ruler (a real one), measure the width of the imageable area, and divide the pixels by the inches. That's your screen resolution. In Photoshop, open Preferences, go to Units and Rulers, enter that value into the Screen Resolution field. Click OK. Then choose View > Print Size. It's now rendered accurately thanks to support for OpenGL.

*A member of the Photoshop World Dream Team of instructors, McClelland has written more than 80 books, the most recent of which is* Adobe Photoshop CS4 One-on-One. *Find him at www.deke.com.*

KEVIN O'CONNOR

# RUSSELL WILLIAMS

**CHIEF ARCHITECT, PHOTOSHOP, ADOBE SYSTEMS INC.**

## •THE BEST ZOOM

When I want to zoom in on an area, I never click the Zoom tool. I hold down Ctrl + Spacebar (Command + Spacebar on a Mac) and draw a rectangular selection around the thing I want to look at. The screen fills with the exact area I want blown up. In CS4, this works even for a critical look, because zooming in to, say, 127.5% still gives a sharply rendered view.

*As an architect of Photoshop, Williams has written key aspects, including Actions and batch file handling, color management, color pickers, and memory management.*

sunpak.com

# Introducing the New Sunpak FlexPod Gripper

## With More Features Than Any Other Flexible Tripod

Unique features, superior quality and innovative design set the standard. The Sunpak Gripper has it all, making it the best flexible tripod on the market. Bend it, twist it, shape it, hang it anywhere for the most creative shots possible.

**Unique FlexPod Gripper features**

- Thermoplastic elastomer legs with patent-pending aluminum core design
- Triangulated segments with gripping teeth for maximum gripping power
- True ball head with easy to use quick-release plate for fast attachment
- Self-leveling feet for added stability on uneven surfaces

The Ritz Camera Centers Family

WOLF CAMERA & IMAGE · KITS CAMERA & IMAGE · RITZ CAMERA & IMAGE · CAMERA & IMAGE · INKLEY'S CAMERA & IMAGE

David Ritz
Chairman, CEO

FlexPod gripper by SUNPAK®

By Philip Ryan

# COMFORT Zone

## Get it all, without going to extremes

**Pity the Canon EOS 50D.** Between the hoopla about the latest full-frame juggernauts from Nikon, Sony, and Canon itself, and the buzz on the debut of the Micro Four Thirds system, it's easy for an impressive new advanced-amateur DSLR to get overlooked.

But for those of us who are serious about our photography and aren't ready to step into a full-frame system, there's a lot to recommend this new 15.1MP DSLR ($1,400, street, body only; $1,600 with 28–135mm f/3.5–5.6 EF IS lens; $2,100 with 18–200mm f/3.5–5.6 EF-S IS lens).

As our tests in the Pop Photo Lab prove, this isn't just an EOS 40D with a megapixel boost.

Granted, the 50D and 40D share the same body and many features; both have APS-C-sized CMOS sensors (1.6X lens factor); and they even use the same BG-E2N battery grip ($190, street). But as if to underscore the differences, the 10.1MP 40D stays in the Canon line ($950, street, body only).

So what's the big change? Aside from more megapixels, it's the DIGIC 4 processor, with ISOs up to 12,800, in-camera vignetting correction, and three sizes of RAW files.

**◀ ON THE BACK:** While dominated by a 3-inch LCD and very handy command wheel, the small extras—an easy-to-use joystick, a live-view access button next to the viewfinder—are welcome touches.

To give you an idea of the processor's power, even though the 50D packs 5MP more than the 40D, its burst rate is 6.3 frames per second, close to the 40D's 6.5 fps. And the 50D shoots at full tilt for up to 90 large Fine-quality JPEGs or 16 RAW files when you use a UDMA CompactFlash card, according to our

### WHAT'S HOT

- 15.1MP APS-C sized CMOS sensor.
- ISO 100–6400, extendable to ISO 12,800.
- Very accurate color.

### WHAT'S NOT

- Noisy at ISO 12,800.
- Noisier than the EOS 40D at middle ISOs.
- No wireless flash control via the pop-up.

### WHO'S THIS FOR?

- Canon shooters who want more power than a Rebel, but don't need (or want to pay for) a full-frame camera, such as the 5D Mark II.

# FLASHPOINT

www.adorama.com

**FREE Shipping**
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

# CARBON FIBER TRIPODS

## ALL THE FEATURES OF HIGH-PRICED CARBON FIBER TRIPODS WITHOUT THE HIGH PRICE

Carbon fiber is much stronger than aluminum yet it is about 30% lighter in weight than aluminum. It absorbs shock and does not transmit vibrations; that ensures sharper images and the built-in bubble level helps you get it straight.

Flashpoint tripods feature European styling. They open and close with ease and have leg locks that really lock solid. Legs are multi-positionable and with the low center column, the tripods can be used for low, ground-level photography. Leg ends are rubber tipped and have retractable spikes.

BALL HEADS: Made of magnesium alloy. stronger and less weight than standard aluminum ball heads.

Available exclusively at **adorama.com**

NEW! Lower Prices

Tripods Shown w/Optional Head

| | HEIGHT | CLOSED | LOAD | WEIGHT | PRICE |
|---|---|---|---|---|---|
| Tripod **F-1128** | 55-1/4" | 18.5" | 9.9 lbs | 2.64 lbs | $152.95 |
| Tripod **F-1228** | 60-1/4" | 20.10" | 17.6 lbs | 3.30 lbs | $179.95 |
| Tripod **F-1328** | 63-3/4" | 21.65" | 24.2 lbs | 3.96 lbs | $269.95 |
| **Monopod** | 55.11" | 18.75" | 11 lbs | 10 oz. | $89.95 |
| Ball Head **F-1** | - | - | 8.8 lbs | 11.6 oz. | $49.95 |
| Ball Head **F-2** | - | - | 11 lbs | 14.4 oz. | $59.95 |
| Ball Head **F-3** | - | - | 17.6 lbs | 16.1 oz. | $74.95 |

# BELLE DRAPE MUSLINS

## HEAVY DUTY SERIES

All of the standard Belle Drape features on DOUBLE THICK 100% cotton, muslin material

**AVAILABLE IN:** • White • Chroma Green • Black • Chroma Blue

NEW!

10 x 12' $59.95
10 x 24' $89.95

***Our Muslins Feature:***

- Lightweight – easy to carry
- Avalible in 2 size '10x'12 & '10x'24
- Rich vibrant colors because of layering techniques during dyeing.
- 100% Cotton Muslin Backgrounds
- Color never fades or loses its vibrancy or depth.
- 4" hemmed loop for hanging on a crossbar
- Dozens Of Colors In Solids, Splatters, Old Masters and Scenics

**For A Complete Selection See Our Web Site**

STARTING AT $39.95

**Get 10% OFF When You Buy Any 3 Belle Drape Backgrounds**

ADORAMA
THE PHOTOGRAPHY PEOPLE
42 West 18th Street, NYC | 800.223.2500
www.adorama.com

Canon SONY Leica Nikon PENTAX OLYMPUS SIGMA SAMSUNG HASSELBLAD FUJIFILM

**▲IMAGE QUALITY:** This midday scene has too much dynamic range for a DSLR to capture, but the 50D's metering exposed nicely for the shadows, and accurate color did justice to the signs. Shot with 18–200mm f/3.5–5.6 EF-S IS lens. Exposure, 1/80 sec at f/22, ISO 1000.

tests. With an old-fashioned CF card, expect up to 60 JPEGs.

The DIGIC 4 also gives you Canon's Auto Lighting Optimizer and Peripheral Illumination Correction. The first adjusts brightness and contrast for images that might not be perfectly exposed when you shoot them. The second lets you load the camera with technical data for as many as 40 EF lenses and then minimizes any vignetting that a particular lens might have.

The new processor also detects up to 35 faces in a shot when shooting in live view. But it doesn't do anything for autofocus in live view. With slow contrast-detection AF, this remains a clunky experience.

## Familiar feel

If you liked the design of the 40D, or for that matter, the 30D, you'll love the 50D. The well-proven approach puts a mode dial on the top left, with six scene modes for less experienced shooters and two custom modes for advanced types. On the right, there's the status LCD, along with three buttons for metering, white balance, AF, drive mode, ISO, and exposure compensation. Three buttons controlling six functions? Yes, because the 50D has two scroll wheels: one next to the shutter button, and a larger one on the camera back.

Despite 10 buttons, two wheels, an on/off switch, and a tiny joystick, the 50D isn't cluttered. There's even room to comfortably place your thumb. And the camera is contoured for a solid grip while you twist it in whatever direction you need.

Advanced shooters might complain about the single CF slot instead of the dual slots found on Nikon's D300 ($1,560, body only). But no one will gripe about the 50D's hot-shoe. With a nifty plastic ridge that mates with Canon's latest flash units, this shoe forms a tighter seal and battles dust and moisture better than older models.

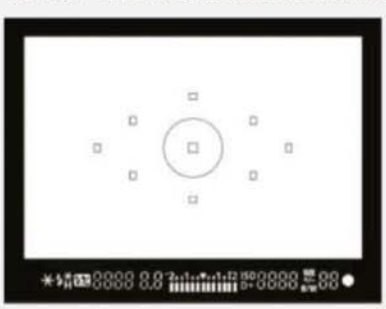
While the 50D's LCD measures a familiar 3 inches, it steps up to 920,000 dots from the 40D's 230,000. Gorgeous! The viewfinder remains at 95-percent accuracy and 0.96X magnification, both Excellent scores by our measure.

## Tale of the tests

In our lab, the 50D scored well, with an Excellent rating in overall image quality right up through ISO 1600 that

# VITAL STATISTICS

**IMAGING:** 15.1MP effective, APS-C-sized CMOS sensor (1.6X lens factor) captures images at 4752x3168 pixels with 14 bits/color in RAW mode. **STORAGE:** Single CompactFlash Type I/II including UDMA; Microdrives. Stores JPEG, RAW, RAW + JPEG files. **BURST RATE:** Full-sized JPEGs (Fine mode): Up to 90 shots at 6.3 fps. RAW: Up to 16 shots at 6.3 fps. (Both tested using UDMA CF card.) **AF SYSTEM:** TTL phase detection with 9 illuminated focus points (all cross-type). Single-shot and continuous AF with Predictive AI Servo focus tracking. Tested sensitivity down to EV –2 (at ISO 100, f/1.4). **LIVE VIEW:** TTL phase detection and contrast detection modes. **SHUTTER SPEEDS:** 1/8000 to 30 sec plus B (1/3-, 1/2-, or 1-EV increments). 100,000-cycle rating. **METERING:** 35-zone TTL metering, Evaluative, Centerweighted, Partial (approx. 9% of viewfinder), and spot (approx. 3.8% of viewfinder). EV 1–20 (at ISO 100). **ISO RANGE:** Normal, ISO 100–3200 (in 1/3 EV increments); expanded, ISO 6400 and 12,800 (in 1-EV increments). **FLASH:** Built-in pop-up unit, GN 43 (in feet at ISO 100), covers angle of view of 17mm lens. X-sync at 1/250 sec. **VIEWFINDER:** Fixed eye-level pentaprism. **LCD:** 3-in. TFT with 920,000-dot resolution, 160-degree viewing angle. **OUTPUT:** Hi-Speed USB 2.0, HDMI (mini-type) video, GPS. **BATTERY:** Rechargeable BP-511A Li-ion; CIPA rating: 640 shots. **SIZE/WEIGHT:** 5.7x4.2x2.9 in., 1.72 lb with card and battery. **STREET PRICE:** $1,400, street, body only; $1,600 with EF 28–135mm f/3.5–5.6 IS USM lens; $2,100 with EF-S 18–200mm f/3.5–5.6 IS lens. **FOR INFO:** www.canoneos.com.



## VIEWFINDER TEST

**ACCURACY:** 95% (Excellent)
**MAGNIFICATION:** 0.96X (Excellent)

dropped only to Extremely High at ISO 3200 and 6400. We saw a marked improvement in color accuracy over the 40D. Both scored Excellent, but the 50D served up an average Delta E of 6.6, versus the 40D's 7.7.

Resolution? Also Excellent, with a score of 2420 lines at ISO 100. At ISO 3200 it stood strong with 2232 lines. By ISO 12,800, resolution dropped off noticeably, sinking to 1997 lines.

Early adopters have complained about the 50D's noise levels. While they have a point, let's not overstate the issue. The 50D performed well overall in our noise tests and handily beat its predecessor at higher ISOs. For example, at ISO 1600, the 50D scored 1.7 for a Low rating, while the 40D produced slightly more noise (2.0) and earned a Moderately Low rating. At ISO 3200, the 50D rated Moderately Low at 2.2, while the 40D scored 2.9 for a Moderate rating.

That said, there are some nuances. First, the new camera underperformed the 40D at the lower ISOs. At ISO 100, with a score of 1.1, it barely made it into the Extremely Low category, compared with 0.8 (also Extremely Low) for the 40D, which maintained its Extremely Low rating through ISO 200. The pattern continued until the two reached parity at ISO 800 (1.5, Very Low).

The way noise manifests itself at higher ISOs is another issue. At the top two settings, we saw bands of noise stretching across the image—not something photographers usually see from a Canon. At least the 50D still gives you a full stop more usable sensitivity than the 40D, which topped out at ISO 3200 and was noisier at that point than the 50D is at ISO 6400.

Finally, the "extended" ISO of 12,800 may have raised expectations too high. The 50D is so noisy at that setting that it may be more of a tease than a useful feature. In our test, noise hit 4.13, an Unacceptable rating. Canon perhaps would've been wise to limit ISO to 6400. Since Nikon has been so successful at extending the ISO range in the D700 and D3, though, Canon probably felt the need to extend to ISO 12,800. But it wasn't necessary; both the Nikon D300 and D90 top out at ISO 6400, where in our noise test the EOS 50D beat them both.

**◀ON THE TOP:** The line of dual-purpose buttons in front of the status display lets you adjust all the most vital settings by scrolling either the command wheel on top or the one on the back.

# CERTIFIED TEST RESULTS

**IMAGE QUALITY** (ISO 100–1600)

EXCELLENT

POOR ⟷ EXCELLENT

**IMAGE QUALITY** (ISO 3200–6400)

EXTREMELY HIGH

POOR ⟷ EXCELLENT

**RESOLUTION** (ISO 100)

EXCELLENT 2420

1500 2000 2500 3000 3500 4000

HIGH ⟷ EXCELLENT

**COLOR ACCURACY** (AVG. DELTA E)

EXCELLENT 6.6

14 12 10 8 6

HIGH ⟷ EXCELLENT

**NOISE** AT ISO

| | |
|---|---|
| 1.10 EXTREMELY LOW | 100 |
| 1.28 VERY LOW | 200 |
| 1.6 LOW | 400 |
| 1.5 VERY LOW | 800 |
| 1.73 LOW | 1600 |
| 2.20 MODERATELY LOW | 3200 |
| 2.58 MODERATE | 6400 |
| ◀4.13 UNACCEPTABLE | 12,800 |

3.0 2.5 2.0 1.5 1.0 0.5

UNACCEPTABLE ⟷ EXTREMELY LOW

**HIGHLIGHT/SHADOW DETAIL**

HIGH

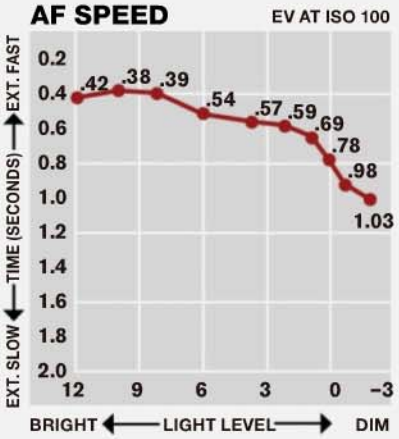
LOW ⟷ EXT. HIGH

**CONTRAST** (AT DEFAULT SETTING)

SLIGHTLY HIGH

LOW ⟷ HIGH

**AF SPEED** EV AT ISO 100



(For our noise tests, we process RAW files in the manufacturer's RAW converter, applying the default amount of noise reduction during conversion, unless otherwise noted.)

## Focus remix

Since Canon kept the same 9-point AF system as in the 40D, it's no surprise that the 50D yielded very similar results in our AF test. In very bright light, the camera focuses in about 0.4 sec, slowing to about 0.6 sec in moderate light levels. Focusing requires less than 1 sec down to EV –1, and slows to 1.03 sec at our test's lowest light level of EV –2 (about the same as the light of a full moon).

Metering? As in the 40D, a 25-zone TTL system. Choose from evaluative metering linked to any AF point, centerweighted, partial (center 9 percent of the viewfinder), or spot. At 3.8 percent of the frame, the 50D's spotmetering is broader than we'd like. Still, the camera does a nice job of determining the proper exposure for a scene.

Overall, an impressive DSLR for the money. There are no awe-inspiring bells or whistles, and the one attempt at that (ISO 12,800) doesn't meet expectations. But is the 50D a solid machine that can turn out beautiful images? Absolutely. And does it offer enough flexibility to create pleasing images all the way up to ISO 3200, and even ISO 6400? Definitely.

Put simply, this is far more than a mere upgrade—it's a camera you shouldn't overlook.

## COMPETITIVE SET

**■NIKON D300 ($1,560, body only; $1,910 with 18–200mm f/3.5–5.6G ED-IF AF-S DX VR II lens)** At 12.3MP, Nikon's D300 loses the megapixel race to the Canon 50D. Both have excellent color accuracy and resolution in our lab tests. The D300 beats the 50D in autofocus, focusing faster in low light. Even at EV –2, the D300 focuses in under 1 second, while the 50D took 1.03 second. Note that Nikon packs 51 AF points to make that happen. Those 51 points cover a larger portion of the viewfinder and the D300's 99-percent-accurate finder beats the 50D's 95-percent accuracy. The D300's benefits, however, push its price higher than the 50D.

**■SONY ALPHA 700 ($1,300 body only; $1,400 with 18–70mm f/3.5–5.6 DT lens; $1,800 with 16–105mm f/3.5–5.6 DT lens)** With 12.2MP, the A700 also trails the 50D a bit in pixel count. It also doesn't match the 50D's color accuracy. But in bright and moderate light, the Sony focuses significantly faster than the 50D. Above ISO 400, the 50D shows lower noise. At ISO 400 and below, the two cameras turn in similar noise performance. Ultimately, these two are very evenly matched. Though the Sony doesn't include live view and has a slightly slower burst rate of 5 fps, it includes sensor-shift image stabilization that'll work with any lens. Canon and Nikon make you buy special lenses to get that shake-beating feature.

RICOH

GX200

To fully experience the beauty of photographic expression.

CAMPAIGN NOW UNDERWAY!

http://www.ricoh.com/r_dc/?amw

Google Search: gx&gr Web Search

Ricoh authorized dealers in the United States

ADORAMA CAMERA, INC. • 42 West 18th Street, New York, NY 10011, Tel: 1-800-223-2500, www.adorama.com

POPFLASH.PHOTO • 2767 Baywater Place, Thousand Oaks, CA 91362, Tel: 1-805-492-6548, www.popflash.com

THE PHOTO VILLAGE, INC. • 1133 Broadway, Suite 824, New York, NY 10010, Tel: 1-212-989-1252, www.photovillage.com

RICOH COMPANY, LIMITED (PMMC) 3-2-3, Shin-Yokohama, Kohoku-ku, Yokohama-shi, Kanagawa 222-8530, Japan, Tel: (81) 45-474-7575, www.ricoh.com/r_dc/

EMAIL INQUIRIES TO ricoh.ww.dsc@nts.ricoh.co.jp

By Julia Silber

# ZOOMThis!

## Canon 18–200mm f/3.5–5.6 EF-S IS AF

### A 29–320mm equivalent on

APS-C Canon EOS models, this lens ($700, street) boasts the broadest zoom range of any interchangeable optic from Canon to date: 11X.

A high-end kit option for EOS 50D owners, it probably owes its existence to the phenomenal success of Nikon's 18–200mm f/3.5–5.6 VR Nikkor. And with the debut of Tamron's far-reaching and stabilized 18–270mm f/3.5–6.3 lens (tested in this issue), an 11X Canon may be just the beginning.

Two glass-molded aspheric elements and two Ultra-low Dispersion (UD) elements control spherical and chromatic aberrations, respectively. And this new lens is internal-focusing, with only four of its 16 elements used to focus. Because these internal elements are significantly smaller than the nonrotating front elements, the lens focuses faster, drains less battery power, and also accepts filter-ring-mount accessories.

The Image Stabilizer includes auto panning detection—when you pan during a shot, it turns off the IS along either the horizontal or vertical axis, depending on camera orientation.

**HANDS ON:** About average in size and weight, the lens sports a large zoom ring that's ribbed, rubberized, and smooth-turning. The relatively small manual-focusing collar—ribbed and made of hard plastic—turns with a loose, underdamped, and slightly scratchy feel. Somewhat more rugged than the average kit zoom, it has a metal (not plastic) lensmount, with focusing and stabilizer switches that fall directly under your left thumb as you hold the camera at eye-level.

On our test camera, the Rebel XS, autofocus was fast, moderately quiet, and accurate, and the lens was compact enough to throw no shadow when used with the camera's built-in flash, except when focused close at the widest zoom settings.

**IN THE LAB:** On the optical bench, the lens delivered Excellent-range SQF performance at the three tested focal lengths, indicating glass of uncompromising sharpness and contrast. At 200mm, its SQF numbers trumped Nikon's, which topped out only in the Good range, two levels down. (Like the Canon, Sigma's 18–200mm f/3.5–5.6 OS lens also showed uniformly Excellent resolving power.)

DxO Analyzer 3.0.1 tests of distortion control found Visible-range barrel distortion at 18mm (0.75%), plus Slight pincushioning at 100mm (0.23%) and 200mm (0.20%). The performance, about what we expected, roughly equaled that of the Nikon and was slightly below the Sigma's.

Light falloff was gone from the corners by f/5 at 18mm, f/6.3 at 100mm, and f/8 at 200mm. Both the Nikon and Sigma lenses fared somewhat better—some focal lengths showed no vignetting whatsoever.

By kit lens standards, the Canon is notable for its close-up powers. At the tight, uniform close-focusing distance of approximately 15.75 inches, magnification ratios ranged from 1:16.9 at 18mm to a gratifying 1:3.16 at 200mm—significantly stronger than the Nikon's 1:3.9 and almost equal to the Sigma's 1:3. Tests of the IS system found gains of between 2.5 and 3 stops in sharp shutter speeds for three testers—not quite up to Canon's 4-stop claim, but par for this course.

**CONCLUSIONS:** In the past two years, the 11X IS superzoom has become the ideal general-purpose lens—certainly for shooters whose cameras don't have on-board shake reduction. This Canon fits the mold. Very light and compact, it's a gracious and adaptable traveling companion. Impressively sharp, it's also an obvious choice for handheld low-light pictures, including event and theater work. Its real fortes, however, are close-up macro subjects, distant wildlife, and almost everything in between. Sports? Go for it!

### Specifications

18–200mm (17.69–199.05mm tested), f/3.5–5.6 (f/3.31–n.a.* tested), 16 elements in 12 groups. Focusing turns 60 degrees counterclockwise. Zoom ring turns 80 degrees clockwise. Focal lengths marked at 18-, 24-, 50-, 80-, 135-, 170-, and 200mm. ■ **Diagonal view angle:** 74–7 degrees. ■ **Weight:** 1.39 lb. ■ **Filter size:** 72mm. ■ **Mounts:** Canon AF. ■ **Street price:** $700.

*Tested measurement not available due to instrument limitation.

### Subjective Quality Factor

| | Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
|---|---|---|---|---|---|---|
| 18MM | 3.5 | 95.5 | 94.2 | 91.0 | 84.4 | 76.3 |
| | 4.0 | 95.5 | 94.3 | 91.0 | 84.6 | 76.6 |
| | 5.6 | 95.5 | 94.2 | 90.9 | 84.1 | 75.7 |
| | 8.0 | 95.6 | 94.2 | 91.0 | 84.3 | 76.0 |
| | 11.0 | 95.4 | 94.1 | 90.7 | 83.8 | 75.2 |
| | 16.0 | 95.4 | 94.0 | 90.6 | 83.8 | 75.6 |
| | 22.0 | 95.9 | 94.9 | 91.7 | 86.0 | 79.1 |
| 100MM | Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
| | 5.6 | 95.5 | 94.7 | 91.7 | 85.9 | 78.8 |
| | 8.0 | 95.2 | 93.9 | 92.3 | 87.1 | 80.9 |
| | 11.0 | 95.1 | 93.5 | 92.8 | 88.2 | 82.9 |
| | 16.0 | 95.4 | 94.1 | 92.7 | 87.9 | 82.4 |
| | 22.0 | 95.3 | 94.7 | 91.8 | 86.6 | 80.4 |
| | 32.0 | 95.3 | 93.5 | 89.8 | 81.9 | 72.0 |
| | 36.0 | 94.9 | 93.3 | 89.5 | 81.2 | 70.7 |
| 200MM | Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
| | 5.6 | 95.4 | 94.0 | 90.6 | 83.6 | 74.8 |
| | 8.0 | 95.5 | 94.3 | 90.9 | 84.1 | 75.6 |
| | 11.0 | 95.6 | 94.3 | 91.1 | 84.6 | 76.6 |
| | 16.0 | 95.5 | 94.2 | 91.0 | 84.6 | 76.8 |
| | 22.0 | 95.3 | 93.8 | 90.3 | 83.1 | 74.2 |
| | 32.0 | 95.3 | 93.2 | 92.5 | 87.6 | 81.8 |
| | 36.0 | 95.2 | 93.2 | 92.6 | 87.9 | 82.5 |

key

| A+ | A | B+ | B | C+ | C | D | F |
|---|---|---|---|---|---|---|---|

By Philip Ryan

# FeatINInches

The incredible shrinking camera

▲**ON THE BACK:** The articulated 3-inch LCD monitor lets you frame your shot easily from any angle, and the buttons next to it give you quick access to functions such as metering and AF mode. Camera is shown actual size.

**WHAT'S HOT**
- Size.
- Extremely high resolution and accurate color.
- Best EVF we've ever seen.

**WHAT'S NOT**
- Noisy at higher ISOs.
- AF quirky in low light.
- Few lenses available yet.

**WHO'S THIS FOR?**
- Anyone who wants a small camera with interchangeable lenses that's more responsive and has better image quality than a compact or superzoom.
- Tech fans who don't mind dropping some cash for a first-of-its-kind camera.

## Panasonic's new Lumix DMC-

G1 isn't a DSLR. Yes, you can remove the lens, and the camera's $800 street price (with 14–45mm f/3.5–5.6 kit lens) makes it more expensive than some entry-level DSLRs. But this tiny interchangeable-lens electronic-viewfinder model represents an entirely new class of camera.

The G1 is the vanguard of the Micro Four Thirds system, a format meant to bridge superzoom EVFs and DSLRs. The idea: To grab people who want the resolution of a DSLR but the simplicity, small size, and nonthreatening look of an EVF or compact.

The G1 (as with all Micro Four Thirds cameras scheduled to follow) has a DSLR-sized Four Thirds sensor, which captures more detail than the tiny chip inside any superzoom. It's also engineered to be smaller than a typical DSLR and super-easy to operate. And to prove it's not intimidating—even fun—it comes in colors (red and blue), as well as black.

## What's the small idea?

A collaboration between Panasonic and Olympus, this new camera and lens system uses a lensmount that's smaller than the one on regular Four Thirds DSLRs from Olympus and Panasonic. With Micro Four Thirds, the distance from the back of the lens to the image sensor is shorter—there's no allowance for a mirror box and thus no optical viewfinder.

The design also permits relatively tiny lenses, even with lens-based image stabilization. Compared with DSLR glass, Micro Four Thirds optics are about half the size for an equivalent focal length. And as with Four Thirds cameras, there's a 2X lens factor.

By EVF standards, the imaging sensor inside a Micro Four Thirds camera is gigantic. A typical superzoom EVF's chip has a diagonal measurement that's less than half of a Micro Four Third sensor's. What does this mean for you? The possibility of slimmer camera bodies that maintain the resolution and versatility of interchangeable lenses.

The G1 operates very similarly to other EVF cameras: You frame the image using either the 3-inch 460,000-dot LCD or the 1,440,000-dot (equivalent) electronic viewfinder. Much like a digital projector, this EVF rapidly combines separate red, green, and blue frames to

graphicauthority.com

## NEW! OUR STUDIO PREMIUM COLLECTION.

# 4 VOLUME BUNDLE-50% OFF!

24x12" STORYBOARDS | MULTIPLE PAGE SIZES | FOLDED CARDS | 411 CARDS | FOR PRESENTATION & MARKETING PIECES.

IMAGES BY YVONNE ROBLES, yvonnerobles.com

GOT A MINUTE? **MAKE A CARD.**
GOT A FEW? **CREATE A BOOK.**

Discover the ease of Graphic Authority products for Photoshop® & Photoshop® Elements.
Add a finishing touch with our design elements: brushes, vectors ornaments & backgrounds.

**NEED IT IN A HURRY?** Just drag-n-drop your images into our ready-made, fully editable layouts.

## SEE US ON THE ROAD

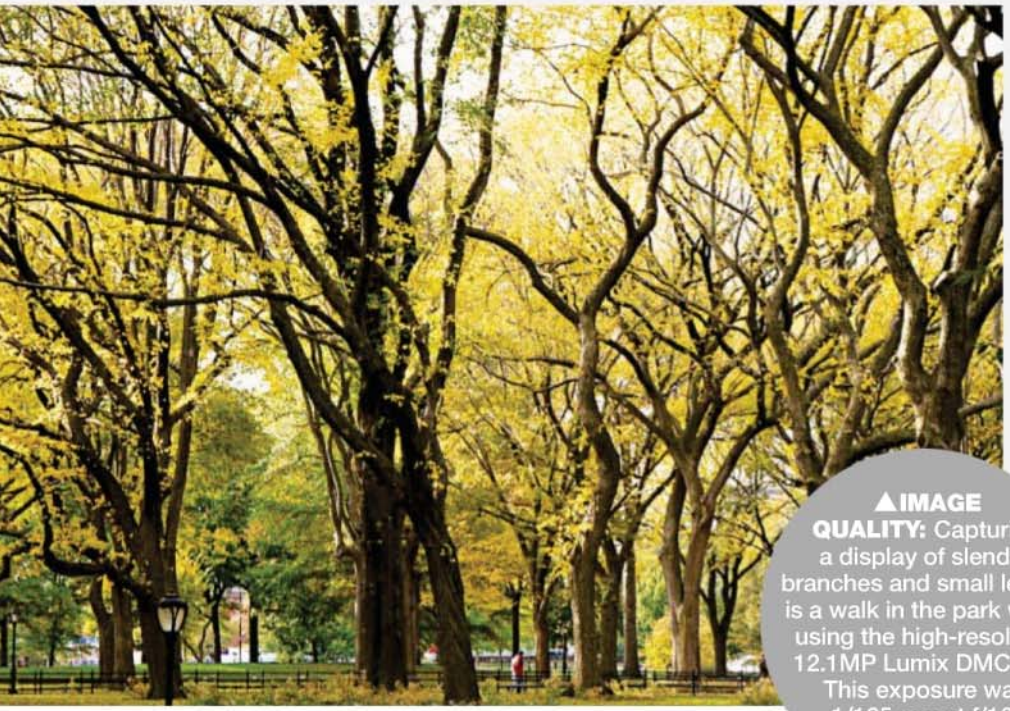
**SENIOR PORTRAIT ARTISTS** LAS VEGAS, NV - JAN 4-5
**MACWORLD** SAN FRANCISCO, CA - JAN 5-9
**IMAGING USA** PHOENIX, AZ - JAN 11-13
**SYNC** ST. PETE BEACH, FL - JAN 18-20
**PP OF IOWA** DES MOINES, IA - JAN 31-FEB 3
**KELBY TRAINING SEMINARS**

GraphicAuthority.com/info/events

**QUESTIONS?**
CALL TOLL FREE 888-856-7840

## ENDS JANUARY 31.

GraphicAuthority.com/pop



▲IMAGE QUALITY: Capturing a display of slender branches and small leaves is a walk in the park when using the high-resolving 12.1MP Lumix DMC-G1. This exposure was 1/125 sec at f/16, ISO 640.

create a full color image that refreshes at 60 frames per second.

The result? The highest-resolution EVF we've seen in a still camera. It still blanks out during burst mode, making it difficult to pan along with a moving subject. But it's bright and impressively detailed. The LCD tilts and swivels to make low- and high-angle shooting easier. When focusing manually, both the EVF and LCD zoom in on your subject automatically, as soon as you start turning the focusing ring on the lens. That's an advantage no optical finder can match.

## Size matters

While our editors like the DSLR-style body, it's not much smaller than the less-expensive Olympus E-420 ($448, street, with 14–42mm f/3.5–5.6 Zuiko ED lens) or Pentax K2000 ($700, street, with 18–55mm f/3.5–5.6 and AF200FG hot-shoe flash). The G1 measures 4.9x3.3x1.8 inches. That's less than a half-inch smaller than the E-420 in each direction. Doesn't seem like enough *in itself* to warrant a new system.

The G1 is really just a proof of concept. For instance, it doesn't shoot video, though Panasonic strongly hints that the next version will capture high-definition video.

# VITAL STATISTICS

**IMAGING:** 12.1MP effective, Live MOS Four Thirds sensor captures images at 4000x3000 pixels with 12 bits/color in RAW mode. **STORAGE:** SD/SDHC cards. Stores JPEG, RAW, RAW + JPEG. **BURST RATE:** Full-sized JPEGs (Extra Fine mode), up to card capacity at 3 fps; RAW, up to 7 shots at 3 fps. **AF SYSTEM:** TTL contrast detection with 23 focus areas and adjustable size single-area focusing. Face detection, single-shot and continuous AF. **SHUTTER SPEEDS:** 1/4000 to 60 sec plus B (1/3-EV increments). **METERING:** TTL metering with 144-zone Intelligent Multiple (a.k.a. evaluative), centerweighted, and spotmetering. EV 0–18 (at ISO 100). **ISO RANGE:** ISO 100–3200 (in 1/3-, 1/2-, or 1-EV increments). **FLASH:** Built-in pop-up flash GN36 (in feet at ISO 100). Supports TTL autoflash with Panasonic Lumix flashes; X-sync at 1/160 sec. **VIEWFINDER:** Electronic viewfinder with 1,440,000-dot equivalent. **LCD:** Fully articulated 3-in. TFT with 460,000-dot resolution. **OUTPUT:** Hi-Speed USB 2.0, HDMI (mini-type) video, NTSC/PAL composite. PictBridge compatible. **BATTERY:** Rechargeable DMW-BLB13PP Li-ion; CIPA rating, 330 (LCD) or 350 (EVF) shots. **SIZE/WEIGHT:** 4.9x3.3x1.78 in., 0.85 lb with card and battery. **STREET PRICE:** $800 with Lumix G Vario 14–45mm f/3.5–5.6 Mega O.I.S. lens. **FOR INFO:** www.panasonic.com.

## VIEWFINDER TEST

**ACCURACY** 100% (Excellent)
**MAGNIFICATION** 0.7X (Acceptable)

◀**ON THE TOP:** A four-way switch for drive mode, along with a dial for focus mode and clickable command wheel, keep the controls simple.

# WE WANT TO BUY
## your used or unused Photo equipment

### Enjoy our online quote feature at www.adorama.com/sell

Adorama spent millions of dollars in 2007 buying 35mm, Medium & Large Format, Scopes, Video and Digital equipment.

Our customers happily traded or cashed in their equipment. We were able to satisfy them BY SIMPLY PAYING ABOVE MARKET VALUE.

Adorama pays top dollar for individual items, rare pieces, collections and estates.

Adorama has over 100,000 new items and more than 20,000 used items in stock.

**WE PAY TOP DOLLAR PLUS**
**For Current Models**

**EXTRA CASH BONUSES**
**for Telephoto lenses of any brand name**

### 3 Small Steps
### FOR GIANT PAYOUTS!

**Fast**
We can arrange a FREE UPS insured pickup in the USA, or you can send it to us at your convenience.

**Simple**
Expect one of our agents to contact you as soon as your equipment is evaluated.

**Smooth**
Your check or trade will be sent out promptly. If you are not pleased with our offer we will return your equipment to you fully insured. Remember shipping is Adorama's expense.

**To find out the value of your equipment, contact us**

**Phone:**
800-223-2500

**Fax:**
212-675-8715

**eMail:**
used@adorama.com
Please Include your phone Number when you eMail.

**Bring it:**
42 West 18th Street
New York NY 10011

**Ship it:**
Att. Used Department.
Adorama
7 Slater Drive
Elizabeth, NJ 07206.

ADORAMA
THE PHOTOGRAPHY PEOPLE

42 West 18th Street | New York, NY 10011 | 800.223.2500

Popular Photography

**Product Services Directory**
IS YOUR AT-HOME SOURCE
FOR EVERYTHING PHOTOGRAPHIC.

You'll find the Product Services Directory in this issue on pages
**102 – 105**

For advertising information about the Product Services Directory, call **CHIP PARHAM** at **(212) 767-5717** or email him: cparham@hfmus.com

• SCHOOLS & WORKSHOPS •
Northwest College
Rocky Mountain School of Photography
The Maine Photographic Workshops

• PHOTO SUPPLIES •
Backdrop Outlet
Denny Manufacturing Co.
Focus Camera
Hoodman

• PRE-OWNED EQUIPMENT •
UsedCameraBuyer.com

• BUSINESS OPPORTUNITIES •
Shuttermom

• MOVIES/FILMS/VIDEOS •
Elite Video

• PHOTO SERVICES •
Reliable Photo

***Plus more new products & services!***

## TEST PANASONIC LUMIX DMC-G1

Controls are, for the most part, well placed, with a decent number of switches, dials, and buttons. A four-way switch next to the mode dial and behind the shutter button lets you choose the drive mode, while a tiny dial on the top changes the focus mode. A cluster of buttons next to the LCD offers quick access to ISO, AF mode, white balance, and metering. A Quick Menu button takes you to image size and aspect ratio, while the Film Mode button gives you various color and black-and-white looks.

We really like the clickable scroll wheel in front of the shutter button. Just press it to get to exposure compensation, and again after dialing how much comp you want. Once our testers got the hang of it, adjusting exposure was fast and easy.

For those who want simplicity—and the backers of this system count them in the millions—there are lots of scene modes, as well as Intelligent Auto, which chooses a scene mode and ISO for you, and even adjusts brightness to bring out details in shadows or highlights.

### Lab report

In our lab tests, the G1 yielded a mixed bag. Color accuracy: an Excellent rating with an average Delta E of 6.21. That's noticeably better than Sony's $3,000 (street, body only) full-frame Alpha 900, which scored an average Delta E of 9.

Viewfinder accuracy: 100 percent. That's a benefit of the electronic viewfinder. On the downside, the viewfinder magnification is just 0.7X. For comparison, the Olympus E-420 scored a 0.93X magnification in our lab test.

Resolution is where the G1 soars. Its 12.1MP sensor captured 2370 lines of resolution at ISO 100. That's better than Nikon's 12.3MP D300, with 2350 lines. You can't expect *that* from a compact camera. Canon's 12MP PowerShot G9 tops out with 2150 lines at ISO 80.

Noise didn't fare as well. At its lowest ISOs, the G1 kept noise to Extremely Low levels, scoring 0.6 at ISO 100. Up to ISO 400, noise remains at Extremely Low and Very Low levels. At ISO 800 noise steps up, scoring 2.03 and pushing it into our Moderately Low range. At ISO 1600 and ISO 3200, it ranks Unacceptable, as noise jumps to 3.8 and 7.5, respectively. Panasonic's own L10 DSLR scored 2.98 at ISO 1600 and doesn't include ISO 3200 at all. Maybe the G1 shouldn't, either.

## CERTIFIED TEST RESULTS

**IMAGE QUALITY** (ISO 100–400)
EXCELLENT
POOR ⟷ EXCELLENT

**IMAGE QUALITY** (ISO 800)
EXTREMELY HIGH
POOR ⟷ EXCELLENT

**RESOLUTION** (ISO 100)
EXCELLENT 2370
1500 2000 2500 3000 3500 4000
HIGH ⟷ EXCELLENT

**COLOR ACCURACY** (AVG. DELTA E)
EXCELLENT 6.21
14 12 10 8 6
HIGH ⟷ EXCELLENT

**NOISE** AT ISO
0.6 EXTREMELY LOW 100
0.7 EXTREMELY LOW 200
1.3 VERY LOW 400
2.0 MODERATELY LOW 800
◀3.8 UNACCEPTABLE 1600
◀7.5 UNACCEPTABLE 3200
3.0 2.5 2.0 1.5 1.0 0.5
UNACCEPTABLE ⟷ EXTREMELY LOW

**HIGHLIGHT/SHADOW DETAIL**
HIGH
LOW ⟷ EXT. HIGH

**CONTRAST** (AT DEFAULT SETTING)
SLIGHTLY LOW
LOW ⟷ HIGH

Anyone who knows autofocus systems might cringe when hearing that the G1 uses a contrast-detection system instead of the phase-detection used in most DSLRs. Phase-detection uses some of the light that lands on an SLR's mirror. Since Micro Four Thirds cameras don't have mirrors, they can't use that system. Instead, the light goes straight through to the sensor where the contrast system kicks in. Typically, a slow-to-focus headache. Yet the G1 has overcome the usual problems, producing the fastest contrast-detection AF system we've ever used.

In the brightest portions of our AF tests (EV 8–12), the G1 focused in less than 0.5 sec. In fact, at EV 12, it focused in just 0.38 sec. That beats the

# BUYDIG.COM®

THE INTERNET'S DIGITAL SUPERSTORE

## 800-617-4686

Sun 10:00am - 6:00pm • Mon-Thurs 9:30am - 7:00pm • Fri 9:30am - 2:00pm

Email us at customerservice@buydig.com

**Shop online anytime!**

All merchandise is brand new and factory fresh and includes USA Manufacturer's Warranty. Prices advertised are subject to additional standard shipping and handling Charges. Go to www.buydig.com or call for details. Paypal and all major credit cards are gladly accepted, no surcharge. We are not responsible for typographical errors. Thank you for shopping at buydig.com Please tell your friends about our great service! Buydig.com is a registered trademark.

BizRate 2007

BBBOnLine RELIABILITY PROGRAM

Lumix L10, with its 0.51 sec at EV 12.

At lower light levels, the G1 slows down quite a bit, though—and here the AF behaved in a way that prevented us from running our usual AF tests. Panasonic rates the AF as effective down to EV 0. In our field testing, the camera focused in lower light than that, but the AF became sluggish and unreliable—the camera tends to ignore the area you selected to focus on and instead widens the area in a desperate attempt to lock onto something. While you lose precision in low light, Panasonic has managed to make contrast AF a viable alternative to phase AF in many situations.

## Glass half full?

As a brand-new system, Micro Four Thirds doesn't offer much in the way of lenses…yet. So far, you're limited to the 14–45mm kit lens and a 45–200mm f/4–5.6 (both image-stabilized). Between those two, you get an equivalent focal-length range of 28–400mm, but this system will need some faster glass if it's to succeed.

Panasonic promises a handful of new lenses later in 2009, and we expect more optics as Olympus and third-party lensmakers, such as Sigma, become involved.

In the meantime, Panasonic offers an adapter that lets you use original Four Thirds lenses on a Micro Four Thirds body. But relatively few Four Thirds lenses are compatible with contrast AF, which means you'll have to focus manually. Also, standard Four Thirds glass is so much larger than Micro Four Third lenses that you'll lose the compactness that's a major selling point of the new format.

As a proof of concept, the G1 succeeds. It's a good camera that outperforms most compacts, delivering lots of detail, accurate colors, and when shooting in enough light, extremely high quality images. The biggest downfall? Price. It's hard to justify spending so much when a DSLR is only slightly larger and a lot less money.

But once HD video capture is built into a Micro Four Thirds model, and the size and price shrink even a little, the equation could change. And that has the potential to shake up photography in a very big way.

LENS TEST

By Julia Silber

# DOWNSize

## Lumix 14–45mm f/3.5–5.6 G Vario Mega O.I.S.

### With the Micro Four Thirds' 2X lens factor, this kit zoom is a 28–90mm equivalent on the Panasonic Lumix DMC-G1, for a nice general-purpose focal-length range. In addition, Panasonic offers a $350 (street) 45–200mm f/4–5.6 (90–400mm equivalent) and promises more Micro Four Thirds glass later in 2009.

**Specifications** 14–45mm f/3.5–5.6 (not tested due to instrument limitations), Mega O.I.S., 12 elements in 9 groups. Focusing turns 90 degrees clockwise. Zoom ring turns 40 degrees clockwise. Focal lengths marked at 14-, 18-, 25-, 35-, and 45mm. ■ **Diagonal view angle:** 75–27 degrees. ■ **Weight:** 0.43 lb. ■ **Filter size:** 52mm. ■ **Mounts:** Micro Four Thirds. ■ **Included:** Lenshood. ■ **Street price:** Available only in kit with the G1 body.

Since it focuses internally, the front element stays fixed, making it easy to use filters in the 52mm filter ring. Of its 12 lens elements, arranged in 9 groups, one is aspherical to combat spherical aberrations. The Mega O.I.S. optical image stabilization has three modes, though there's only an on/off switch on the lens. To change IS mode, you have to use a menu in the camera. One mode activates stabilization when the shutter is half-pressed, another when it's fully pressed, and the third stabilizes just in the vertical axis for panning.

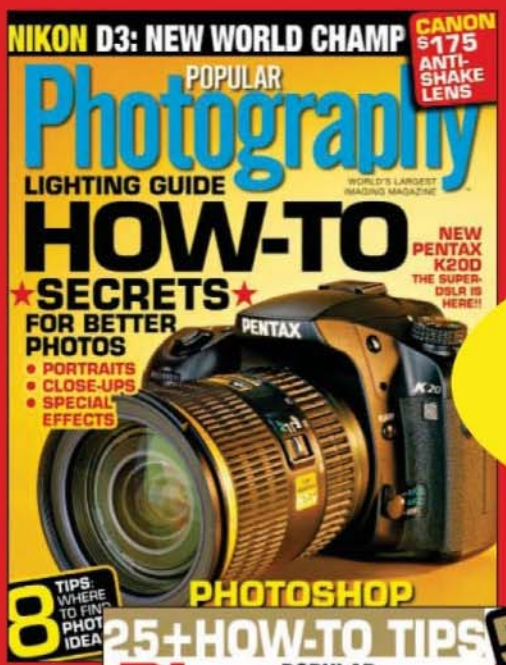
**SIZE CHART:** Micro Four Thirds 14–45mm (top) vs. an equivalent Four Thirds lens.

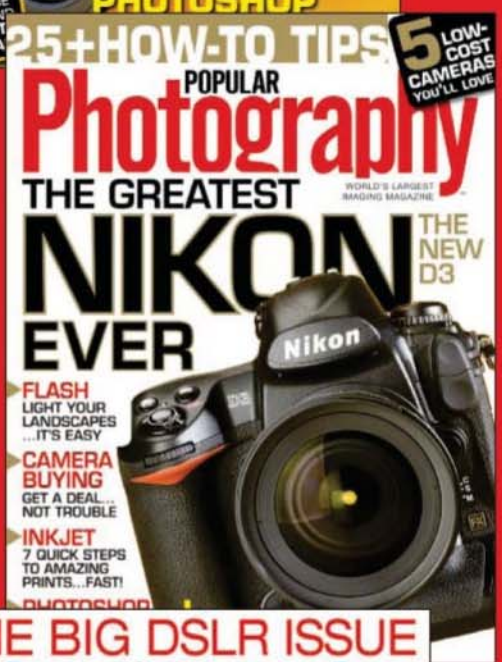
**HANDS ON:** The lens is small—just 2.36 inches long. Compare that with 3.38 inches for Olympus' Zuiko Digital 14–45mm f/3.5–5.6 for regular Four Thirds cameras. It's light, too—0.43 pound versus 0.63 for the Olympus.

Although the zooming action is well damped, turning on the focusing ring is a bit scratchy.

**IN THE LAB:** Our test bench couldn't yet provide SQF data for this brand-new format, but given the high resolution the G1 scored with this lens, we know it's sharp. In DxO Analyzer 3.0.1 tests, we recorded only Slight barrel distortion (0.17%) at 14mm, Slight barrel (0.16%) again at 25mm, and Imperceptible barrel (0.02%) at 45mm. Light falloff was gone by f/5 at 14mm and 25mm, and f/6.3 at 45mm. Close-focus distance was 8.75 inches at 14mm, 9.5 inches at 25mm, and 10.75 inches at 45mm. Magnification ratio: 1:11.04 at 14mm; 1:6.72 at 25mm; and 1:4.83 at 45mm. With the lens racked out to 45mm and IS in Mode 1, our testers averaged between 2 and 2.5 stops of handholding gain.

**CONCLUSIONS:** In all, a good showing. And an impressive debut for a brand-new system.



# POPULAR Photography

# 3 for 1 Gift Offer!

Don't miss this opportunity to send gifts to three of your fellow enthusiasts. . . ***all for the price of just one!***

***PLUS, We'll send you FREE cards to announce your gift!****

Send **1** year (12 issues) of

**POPULAR Photography**

to **3** friends for **just $14.**

It's like getting two for **FREE.**

## Celebrate Your Passion This Holiday Season & Give 3 Gift Subscriptions *for the Price of Just ONE!*

Call Toll-Free **1-800-548-5498**

Please Mention Code 78NA86

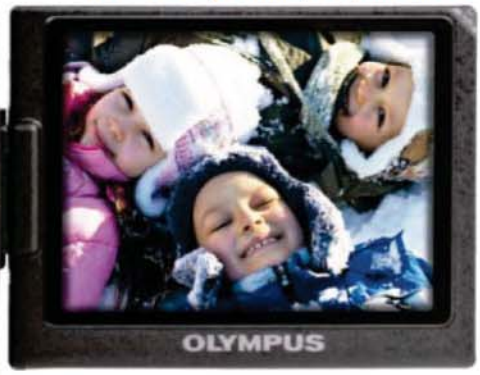
POPULAR PHOTOGRAPHY, P.O. Box 54915, Boulder, CO 80322-4915

*After December 1, we will mail the card (in your name) directly to your recipients. Offer valid in U.S. and Canada only. Canadian orders add $8 per subscription (includes GST) for postage. Payment in U.S. funds must accompany order. Please allow 30-60 days for delivery of first issue.

By Dan Richards

# ART Attack

As creative as you are




▼**ON THE BACK:** Many controls are found on dedicated buttons. The articulating LCD screen can be tilted up and down, and even folded with the screen facing the body for protection.

## Ready for Art Filters?

The new Olympus E-30 ($1,300, estimated street, body only) has six of these in its ample bag of tricks, along with some high-end capabilities inherited from the flagship Olympus E-3. It's also the first Olympus DSLR to crack the 10-megapixel barrier, with a 12.3MP Live MOS sensor.

Positioned just below the E-3 in the Olympus lineup, the E-30 gets the sophisticated autofocus system of the top camera, with 11 twinned focusing points, as well as the 5-frames-per-second burst rate. It has an articulating (tilt and swivel) LCD monitor, too—but, at 2.7 inches, it's bigger than the E-3's 2.5-incher. The camera even takes the same optional HLD-4 vertical battery grip ($200, street) as the E-3.

What it doesn't get from the E-3 is full battle-worthiness. The E-30's body is reinforced polycarbonate, rather than magnesium alloy, and it lacks the weathersealing of the E-3. And while it has the same shutter speed range of the E-3 (60 to 1/8000 sec, with a top flash sync of 1/250 sec), the shutter is not rated for durability (common among consumer-level cameras), whereas the E-3's has a 150,000-cycle rating.

The upside is that the E-30 is lighter and smaller than the E-3. We handled a preproduction model and were impressed with the fine ergonomics of the camera, the well-designed grip and finger rests. The E-30 also sports (yay!) two command dials rather than the single dial of the lower-rung Olympus E-520 and E-420.

What really makes the E-30 stand out in the lineup is the assortment

### NEW & NOTEWORTHY

**■Highest pixel count yet in an Olympus DSLR. ■Has the AF, burst rate, multi-angle LCD of the E-3. ■Wild (and slightly woolly) in-camera special effects.**

### CONSIDER THIS IF...

**■You're a Four Thirds shooter who wants a high-end camera at a lower-end price than the E-3. ■You gotta have those special effects.**

MARZANNA SYNCERZ/FOTOLIA

of Art Filters (special effects applied to JPEGs on the fly), plus the best-designed multiple-exposure system we've seen so far in a DSLR.

Art Filters? These are: Soft Focus; Pale & Light Color (a pastel rendition); Light Tone (a high-key effect); Grainy Film, which, besides converting to grainy black-and-white, gives a high-contrast, lithographic look; Pin Hole, which vignettes edges and softens the image; and Pop Art, an oversaturated look that Olympus says expresses "the joyful, lighthearted feeling of the Pop Art style of the 1960s."

If you're thinking *cheesy*, well, yes. But the Art Filters are fun, and the less over-the-top ones, such as Pale & Light Color, yield pretty effects if used in moderation. (Wedding photographers, take note.) And since the E-30 can capture JPEGs and RAW simultaneously, you can always go back to a straight rendition if you decide the Grainy Film version of your elderly aunt really was a bad idea.

The multiple-exposure mode, for composite images, works through live view. It's neat. Take a shot, and it's displayed as a semi-transparent overlay on the live view, so you can accurately position an additional exposure. Combine up to four images, and the E-30 will automatically adjust their brightness. Wedding photographers will love this, too.

The new TruePic III+ image processor promises greater dynamic range than that of the E-3. A Digital Leveler displays sideways and fore-and-aft tilt, both in the viewfinder and on the live view screen. The E-30 includes the rest of the goodies we've come to expect in Olympus DSLRs: sensor-shift image stabilization (with two panning modes), self-cleaning sensor, wireless TTL control of multiple flashes via the pop-up unit, face detection, and thumbnail previews of the effects of various settings.

Introduced with the camera was the 14–54mm f/2.8–3.5 II Zuiko Digital lens ($600, estimated street), which Olympus may also offer in a kit with the E-30. The projected price of the E-30 puts it in a tough bracket—competitors include the Canon EOS 50D (tested in this issue), Nikon D300, and Sony Alpha 700. So it remains to be seen if the E-30 can master the art…of the deal.


Your chances of finding digital filters better than Heliopan?

Slim... and... None.

37% less ring thickness eliminates vignetting.

99.9% reflection elimination.

Heliopan SH-PMC digital filters have 8 metallic coatings per side that eliminate 99.9% of light reflections. Each side's top coating repels dust and moisture. Heliopan uses the world's best optical quality glass: Schott™ (Zeiss™). Brass rings prevent "binding" and are black anodized. Most sizes and types available. Heliopan is made in Germany.

HP Marketing Corp.

973/808-9010 For dealer list, visit www.hpmarketingcorp.com

a GEPE GROUP company

heliopan

The perfect filters for perfectionists.



JOIN THE PREFERRED READER SURVEY PANEL

SIGN UP! YOU COULD WIN $10,000 CASH

NO PURCHASE NECESSARY, BUT YOU NEED TO ENTER TO WIN!

JOIN NOW!

INSTANT CASH GIVEAWAY WIN $350 INSTANT CASH THIS MONTH

WE KNOW YOU LOVE PHOTOGRAPHY.

That's why we want your opinion. Join the Popular Photography Preferred Reader Survey Panel, and share your thoughts on a range of topics. As our way of saying **"Thank you!"** we are giving away **$25,000 in cash**. And each time you participate in an online survey, you increase your entries into the sweepstakes.

- **FIRST PRIZE: $10,000**
- **SECOND PRIZE: $5,000**
- **THIRD PRIZE: 3 winners of $1,000**
- **FOURTH PRIZE: 70 runners-up of $100**

To enter, visit: www.PopPhoto.com/sweepstakes

**NO PURCHASE NECESSARY TO ENTER.** The "Instant Cash Giveaway" Sweepstakes is open to legal residents of the 50 United States (including Washington, DC) and Canada (except the province of Quebec) age 18 or older at time of entry and who have a valid email address. To view complete Official Rules (including all entry deadlines) governing this Sweepstakes visit: www.PopPhoto.com/sweepstakes. Starts 12:01 AM Eastern Time ("ET") on 11/11/08. Ends 11:59 PM (ET) on 12/31/09. Void in the province of Quebec and where prohibited by law. Sponsor: Hachette Filipacchi Media US. Limit: One entry per person or email address per calendar monthly entry period.

PREFERRED READER SURVEY PANEL

POPULAR Photography

By Julia Silber

# ALLAccess

## Tamron 18–270mm f/3.5–6.3 Di II VC AF

**With the broadest zoom range** (15X) of any interchangeable lens for DSLRs, this 28–419mm equivalent superzoom ($600, street) also packs a Vibration Compensation system for sharp handheld shooting at long focal lengths or slow shutter speeds.

Made with three hybrid aspheric elements and two elements of low-dispersion glass, it's available in Canon and Nikon mounts. The latter has a built-in motor, so it can be used on all Nikon bodies with sensors smaller than full-frame, including the D40 and D40X. (Why no other mounts? Most other DSLR bodies have built-in image stabilization, so they don't need the VC in this Tamron.)

**HANDS ON:** Slightly lighter than Canon's and Sigma's 18–200mm (11X) stabilized superzooms, the lens is very light considering that it reaches well over 400mm (in full-frame terms). While, when racked out, it's almost an inch longer than Tamron's nonstabilized 18–250mm, the new lens is still compact enough that it casts a shadow only at its widest settings (18–28mm) when used on a Nikon D90 with its built-in flash.

Well marked, with amply sized, very legible, white-on-black focusing and zoom scales, the lens has a half-inch-wide ring with an underdamped turning action and narrow turning radius for fast, if coarse, manual focusing. The zoom action is adequately damped, though slightly uneven, stiffening as you go out. Autofocus on the Nikon D90 was quiet, moderately fast, and accurate. There are three barrel switches: MF/AF, VC on/off, and a zoom lock at 18mm.

**IN THE LAB:** Optical bench tests for sharpness and contrast produced SQF numbers in the Excellent range at all tested focal lengths except 270mm, where they dipped into the Good range. The numbers were similar to those of most superzooms and almost identical to those of Tamron's 18–250mm.

DxO Analyzer 3.0.1 distortion tests found Visible-range barrel distortion at 18mm (0.75%), and pincushioning in the Slight range at 35mm (0.19%), 100mm (0.22%), and 270mm (0.15%)—again about the same as the 18–250mm. The results suggest that Tamron was able to add the extra reach and Vibration Compensation at little or no optical cost.

Light falloff was gone from the corners by f/5 at 18mm. At the other three zoom settings, we found no discernible vignetting at all. This is a noteworthy achievement compared with most of the competition, and it's a noticeable improvement over the 18–250mm, which showed vignetting at every tested focal length.

Maximum magnification at the uniform close-focusing distance of approximately 15.7 inches ranged from 1:14 at 18mm to a high-powered 1:2.89 at 270mm—significantly stronger than Tamron's published spec of 1:3.5.

Tests of the Vibration Compensation system found handholding gains of between 1.5 and 3 shutter speeds for three different testers. The results also suggested that, more than with most image-stabilized zooms, users will get the best VC performance from this lens by waiting a full second between shots.

**CONCLUSIONS:** With a 1-2-3 punch delivered by that unequaled zoom range, Vibration Compensation for handholding, and impressive macro and vignetting performances, this is arguably the single most useful lens available to sub-full-frame digital shooters. Autofocus, while not sluggish, is a little too slow for truly active subjects, and the softening at 270mm may be a deal-killer for photographers who need critically sharp tele images.

Most amateurs, however, could shoot for months, if not years, without ever needing or wanting another lens. You may never need a teleconverter or tripod, either!

**Specifications** 18–270mm (18.25–267.63mm tested), f/3.5–6.3 (f/3.30–n.a.* tested), 18 elements in 13 groups. Focusing turns 70 degrees clockwise. Zoom ring turns 80 degrees counterclockwise. Focal lengths marked at 18-, 35-, 50-, 70-, 100-, 200-, and 270mm. ■ **Diagonal view angle:** 75–5 degrees. ■ **Weight:** 1.32 lb. ■ **Filter size:** 72mm. ■ **Mounts:** Canon AF, Nikon AF. ■ **Included:** Lenshood. ■ **Street price:** $600.

*Tested measurement not available due to instrument limitation.

## Subjective Quality Factor

**18MM**

| Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
|---|---|---|---|---|---|
| 3.5 | 95.5 | 94.2 | 90.9 | 84.3 | 76.1 |
| 4.0 | 95.5 | 94.2 | 90.9 | 84.2 | 76.1 |
| 5.6 | 95.4 | 94.2 | 91.1 | 84.7 | 76.9 |
| 8.0 | 95.4 | 94.2 | 91.0 | 84.4 | 76.3 |
| 11.0 | 95.5 | 94.2 | 90.9 | 84.2 | 75.9 |
| 16.0 | 95.4 | 94.1 | 90.7 | 83.9 | 75.6 |
| 22.0 | 95.3 | 93.8 | 90.4 | 83.5 | 75.1 |

**35MM**

| Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
|---|---|---|---|---|---|
| 4.2 | 95.5 | 94.5 | 91.5 | 85.3 | 77.7 |
| 5.6 | 95.5 | 94.7 | 91.8 | 85.9 | 78.8 |
| 8.0 | 95.5 | 94.8 | 91.9 | 86.2 | 79.4 |
| 11.0 | 95.4 | 94.8 | 91.5 | 85.4 | 77.9 |
| 16.0 | 95.7 | 94.4 | 91.3 | 85.0 | 77.4 |
| 22.0 | 95.3 | 93.9 | 90.4 | 83.5 | 74.9 |
| 29.0 | 94.9 | 93.4 | 89.6 | 81.6 | 71.6 |

**100MM**

| Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
|---|---|---|---|---|---|
| 5.6 | 96.0 | 95.5 | 93.1 | 88.9 | 84.1 |
| 8.0 | 95.5 | 95.4 | 93.0 | 88.7 | 83.8 |
| 11.0 | 95.6 | 95.5 | 93.2 | 89.0 | 84.3 |
| 16.0 | 95.4 | 95.3 | 92.7 | 88.2 | 83.1 |
| 22.0 | 95.1 | 94.8 | 91.7 | 86.2 | 79.6 |
| 32.0 | 95.1 | 93.6 | 90.0 | 82.5 | 73.1 |
| 36.0 | 94.8 | 93.2 | 89.3 | 80.8 | 70.0 |

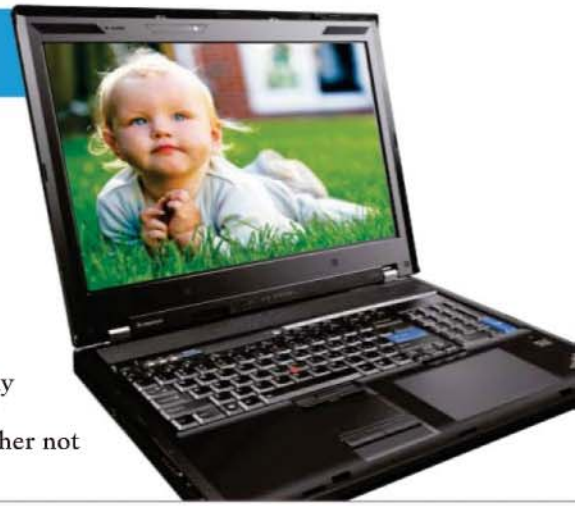
**270MM**

| Size | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 |
|---|---|---|---|---|---|
| 6.3 | 94.8 | 92.0 | 83.0 | 68.1 | 55.3 |
| 8.0 | 94.8 | 92.1 | 83.3 | 68.5 | 55.6 |
| 11.0 | 95.1 | 92.6 | 84.9 | 71.2 | 59.2 |
| 16.0 | 95.2 | 92.7 | 84.8 | 71.3 | 58.2 |
| 22.0 | 95.0 | 92.2 | 83.2 | 68.7 | 53.1 |
| 32.0 | 94.5 | 91.2 | 80.2 | 63.7 | 53.3 |
| 40.0 | 93.9 | 90.2 | 78.1 | 58.8 | 46.4 |

**key**

| A+ | A | B+ | B | C+ | C | D | F |
|---|---|---|---|---|---|---|---|

**YOU *CAN* TAKE IT WITH YOU:** The Lenovo Elite ThinkPad W700 takes your digital darkroom on the road.



# Which Laptop Should I Buy?

**I'm about to retire both my** notebook and my desktop computers—neither can keep up with me anymore. I shoot a lot of RAW, just started taking HD video, and I travel all the time. Is there a notebook powerful enough to serve as my home computer, as well as my workhorse on the road? I'd rather not buy two new machines.

**Laptops are more powerful** than ever, and you can easily find a fantastic one for both home and away.

If you're an Apple fan, the new 15-inch MacBook Pro (from $2,000, direct; www.apple.com), with a beautiful LED-backlit display, may be the best choice. Its new graphics architecture lets you switch between two processors—a battery-saving one for travel and a high-performance one for when you're plugged in at home.

A great portable for PC users is Sony's Vaio AW series (from $2,300, direct; www.sonystyle.com). Billed as high-definition, it has a built-in Blu-ray player and optional Blu-ray recorder ($100). HDMI ports connect it to an HDTV, so playing your own HD videos is a snap. The extrawide Adobe RGB display is a boon for editing and selecting photos, with lots of room to compare them side-by-side. There's a built-in CompactFlash slot, and Adobe Photoshop Lightroom comes installed.

But for the sweetest portable studio, there's only one choice: Lenovo's Elite ThinkPad W700 (up to $5,300, direct, for all the bells and whistles; www.lenovo.com/us/en). Picture this: a built-in Wacom tablet and pop-out pen for retouching, and an actual Pantone screen calibrator embedded next to the keyboard to ensure color is accurate wherever you work. Its screen is 17 inches of beauty. And it includes two RAID-ready 200GB hard drives.

Other bonuses? Memory card slots, Blu-ray recorder, and, for top security, full-disk encryption and fingerprint reader. At home, plug the ThinkPad into the optional MiniDock ($250, direct) for multiple USB ports and an eSATA port to add speedy backup.

A machine like this ThinkPad is sure to be the only one you need.

DRUVO/ISTOCKPHOTO (SCREEN IMAGE)

Three Seconds to Shoot
Velocity 9x
model 5769
Carry Like a Backpack, Access Like a Shoulder Bag with Tamrac's all new Velocity Series
Tamrac's new photo sling packs combine the comfort of a backpack with the fast access of a shoulder bag. New Quick-Flip Tops™ open away from the body for super fast access to photo gear. The front pockets feature Tamrac's patented Memory & Battery Management System™ that identifies available memory cards and batteries.
Velocity 6x model 5766
Velocity 7x model 5767
Velocity 8x model 5768
Available in four sizes for every photographer including professionals.
For a free 80 page color catalog, call toll-free: 1-800-662-0717
www.tamrac.com
See the ALL NEW Velocity Series and over 100 other products.
tamrac®
PHOTO, LUGGAGE & COMPUTER CASES

888-685-9940
focus camera, inc.

You Can't Put a Price on Trust!

Serving Customers Honorably Since 1966

3 Ways to Shop:
• Online • Toll-Free
• Retail Showroom

Featuring
SONY
α Alpha DSLR A700
like.no.other

12.2MP

Thousands of Brand Name Products
• Digital Photography
• Camcorders • Watches
• Telescopes & Binoculars
• Consumer Electronics
• Home Appliances

Canon
PowerShot SD890 IS
DIGITAL ELPH

10MP

SONY • CANON • KODAK • NIKON • OLYMPUS • PENTAX • SAMSUNG • HP etc.

888-685-9940
online: focuscamera.com

TRAINING VIDEOS
For your digital camera

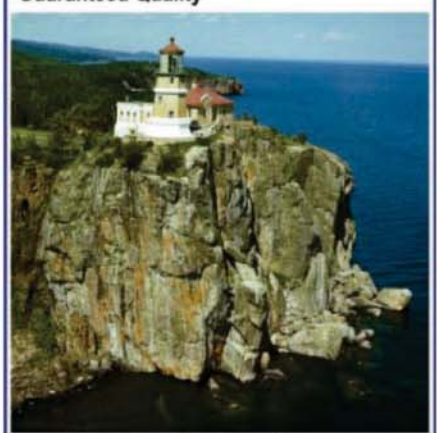
Canon XSi XTi 5D 40D 30D 20D
Nikon D40-50-60-70-80 D300 D200 D90
SONY DSC-R1 FX-1 A-350 300 200 A-700 VX2100 HC7 SR7 CX7
PENTAX K200D K100D *IST
OLYMPUS E-3 E-520 E-500 E-510
FUJI S-5

And MANY more !!
Beginner to Advanced
www.elitevideo.com
1-800-468-1996

Perfect Posters ● com
Your Headquarters for
LARGE DIGITAL PRINTS
Dye Glossy, Satin, Matte $3.75/sq ft
Archival Pigment Satin $4.80/sq ft
Archival Matte Canvas $9.00/sq ft

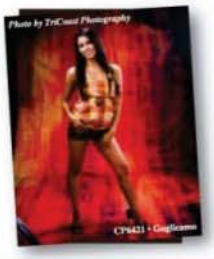
File sizes to 200 Megabytes
Any shape or size to 40 x 72"
Blind drop ship directly to your customer
Same Day Shipment available

Consistent Color
Guaranteed Quality



www.PerfectPosters.com
a 100% digital lab

Denny Manufacturing Co., Inc.
"The World's Largest Manufacturer of Photographic Backdrops and Props."



Visit our website and SAVE up to 70%!
800.844.5616
www.dennymfg.com

OMNI-BOUNCE
Used by Professionals around the world, to achieve soft natural lighting with most of the popular brand flash units. Ideal for wide angle shots, macro work, portraits and news coverage. Custom mounting with no Velcro required. Specify your strobe when ordering.

Only $19.95 + $2.50 shipping, Visa, MasterCard & AMEX
STO-FEN PRODUCTS
800-538-0730
P.O. Box 7609, Santa Cruz, CA 95061, USA
www.stofen.com

shuttermom
profitable photography
The complete online community for photographers of all levels!
Free articles, discussion forum, photo contest, photo blogging and more.
Information for starting your photography business or boosting your existing business.
www.shuttermom.com

Frederick's Photo Lab
Try our lab and receive 50% Off (up to $250 off of first order)
For all your sports and portrait printing needs

See our website to check out our specailty products!
1-866-356-9701
www.fredericksphotolab.com

Camera Conversions
Infrared, UV Filters
Cameras Sold & Modified For:
IR-Only: (Dedicated IR)
UV+Visible+IR : (Full Range)
HR: High Res (No AA)
Get the most out of your camera!
A new life for your old camera!
Canon: 60D, 10D, 20D, 30D, 40D, 200D, 350D, 400D, 5D, Mk#1Ds, G7, G9
Nikon: D1X, D2X, D100, D200, D300, D40, D40X, D50, D70, D80,
Fuji: S3 Pro, S5 Pro Olympus: E500 Sony: DSR-R1, and many others
Scratched Sensors Replaced - Sensor Cleaning
1-2 Day Typical Turn-Around, Cleanroom, Professional Modifications since 1997
800-588-3382 201-882-0344
www.MaxMax.com

# Sell your used camera equipment

digital SLR's
medium format
large format
35mm
rangefinder
lenses
flashes
TLR's
digital video
accessories

**We Pay Top Dollar**

We purchase millions of dollars in camera gear every year from professional photographers and photo enthusiasts just like you.

Call Toll Free **866-735-5444**

UCB used camera buyer

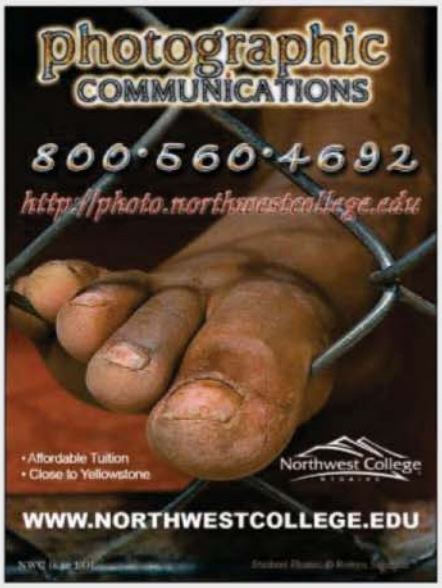
Get your FREE price quote at:

**www.UsedCameraBuyer.com**

## TRAVEL, SCHOOLS & WORKSHOPS

SO WHAT DOES YOUR WORLD LOOK LIKE?

Popular Photography invites you to fulfill your photographic and personal ambitions and realize your dream with our TRAVEL, SCHOOLS & WORKSHOPS SECTION.



**STUTTERING**
We Can Help!
www.stutteringhelp.org
1-800-992-9392
THE STUTTERING FOUNDATION®

**FEDERAL STEREO**
Home Theater By The Experts
Bringing the highest quality in Audio/Video equipment to the world at the lowest possible price.
Call us now for pricing & availability
**1-800-672-2603**
or visit us at:
www.FederalStereo.com

**20x30 or 20x24 ONLY $11.95**

From any Digital File or Negative!!! Add 50% for slide
Digital Prints on Photographic Paper

| QTY. | 5x7 | 8x10 | 11x14 | 16x20 | 20x24 | 20x30 | 30x40 |
|---|---|---|---|---|---|---|---|
| 1 | .99 | 1.99 | 4.99 | 10.00 | 10.90 | 11.95 | 49.95 |
| 10 | .90 | 1.75 | 4.75 | 9.79 | 10.75 | 11.75 | 47.95 |
| 25 | .85 | 1.60 | 4.50 | 9.25 | 10.00 | 11.00 | 44.95 |

Add $7.50 for S&H
COLOR CORRECTED 4X6'S ONLY $0.29
We can convert your old 8mm to DVD
PHOTO STAMPS PHOTO PILLOWS
PHOTO THROWS PHOTO PUZZLES
PHOTO BOOKS PHOTO CARDS
PHOTO MAGNETS PHOTO LUGGAGETAGS
Order online! www.reliablephoto.com

**RELIABLE PHOTO, INC.**
5120 Oakton St, Skokie, IL 60677
847-673-1234
reliablephoto@gmail.com

**"How to make $2,970.00 in one weekend photographing people and pets..."** *Photographers,* Traditional or digital, novice or advanced, if you'd like to MAKE LARGE CHUNKS OF MONEY IN SHORT PERIODS OF TIME you *must* get the FREE E-BOOK AND 6-PART E-COURSE at www.POP-NYNphotoschool.com. You'll discover how you can have your own business from HOME, STUDIO, or ON LOCATION, be open when you want, TAKE MONTHS OFF if you want, *plus*, have CLIENTS AUTOMATICALLY CALLING YOU! If you love photography, but hate selling, this is for you!...

FREE WEBSITE, E-BOOK, AND 6-PART COURSE visit
**www.POP-NYNphotoschool.com**

**PERFECTION DISTRIBUTING INC.**

*Large Enough to Serve You Small Enough to Know You*

- Albums & Folios
- Photomounts
- Presentation Boxes
- Photo Lacquer
- Mounting Board
- Proof Albums
- Memory Mates
- CD Holders
- Photo Frames
- *and much more...*

TAP flora PROFESSIONAL ALBUMS
RENAISSANCE Topflight
SUREGUARD PREMIRA

*order online*
*www.perfectiondistributing.com*
*1-800-558-5830*
*Family owned for over 75 years*

# HoodEYE™ Digital Camera EYECUP

HoodEYE™ links eye to camera for improved Viewfinder optics. Easily upgrade your camera eyepiece in seconds. Four models fit all Canon and Nikon Digital SLR cameras. Unique self locking mount system keeps HoodEYE™ securely in place. Find a dealer near you at www.hoodmanusa.com or order direct now.

**Toll Free (800) 818-3946**

## Sometimes the Money Shot is low...

# GET DOWN!

Creative low angle shots are easy when you have Hoodman's Universal Right Angle Viewer. The H-RAV fits all Canon, Nikon and Fuji Digital SLR cameras. Features include a ± 3 diopter adjustment, 1X and 2.5X magnification and 4 universal mounting attachments to complete the kit. Find a dealer near you at www.hoodmanusa.com or order direct now.
Toll Free: (800) 818-3946

## Take your share of an $8-Billion Market!

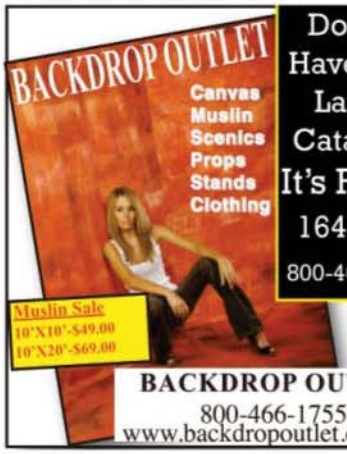
Use our patented, matted frames to turn your photos into real profits as *Keepsake Greeting Cards!*

PHOTOGRAPHER'S Edge Inc

10% OFF Your First Order

*Order a free catalog and sample!*

**www.PhotographersEdge.com • 1-800-550-9254**




Do You Have Our Latest Catalog? It's Free! 164 pgs 800-466-1755

**BACKDROP OUTLET**
800-466-1755
www.backdropoutlet.com

## PREVENT A LITTER

**SPAY or NEUTER your pet.**

THE HUMANE SOCIETY OF THE UNITED STATES

*Promoting the protection of all animals*

## *The Acratech GV2*

- *Weighs less than1 lb (.45kg)*
- *Easily holds over 25 lbs (11kg).*
- *Works as both a Ballhead and a Gimbal Head.*
- *Made in the USA.*

**www.acratech.net**
(909) 394-1802

# MONOSTAT OF SWITZERLAND

The professional unipod with Rotation Stabilizer

**Monostat, the world's first and only unipod with a unique foot stabilizer.**

A precision product of Switzerland

**STURDY**

**LIGHTWEIGHT**

**STABLE**

Introducing the new ART System

ART – Anti Rotation Tubing allows simpler and faster opening from any position of the tubes.

The revolutionary "Swivel Toe Stabilizer" allows:

- Steady shots up to a 60 degree angle to the horizontal
- Stabilization in the vertical and horizontal axes.

• Picture shooting on slippery surfaces, such as *marble* or *ice*, and from *moving vehicles*.

**Monostat-RS** monopods are available in aluminum and high tech 6X carbon fiber. They extend to maximum heights and retract to be highly transportable. The 3/8, ¼" reversible camera mount allows for the convenient attachment of most types of cameras.

Distributed by:

ACCURATE SALES, INC.
photo supply wholesaler

718-302-7063 • info@monostat.us

**www.monostat.us**

# www•CAMBRIDGEWORLD•com

ANYTHING PHOTOGRAPHIC
CAMERAS, FILTERS, LENSES, CASES
METERS, DARKROOM, BINOCULARS, etc

CAMBRIDGE WORLD

50 YEARS OF EXPERIENCE

**New, Used, Refurbished, Preowned At Discount Prices**

**We Buy, Trade, Export, Import, Online Sales & Wholesale**

**Expert Camera Repair Center at Reasonable Prices!**

**1-800-221-2253 • 1-718-858-5002 • 1-212-675-8600**

## LENSES FOR MOST MANUAL & AUTOFOCUS AF CAMERAS

| | | | |
|---|---|---|---|
| 24mm F2.8 | 79.95 | 135mm F3.5 | 29.95 |
| 28mm F2.8 | 49.95 | 135mm F2.8 | 49.95 |
| 35mm F2.8 | 39.95 | 200mm F3.5 | 79.95 |
| 50mm F1.8 | 69.95 | 300mm F5.6 | 99.95 |
| 50mm F1.4 | 189.95 | 400mm F6.3 | 99.95 |
| 100mm F3.5 | 119.95 | 500mm F8 | 99.95 |

500mm 1000mm combination ..... 129.95
19-35mm F3.5-4.5 ..... 149.95
28-80mm F3.5-5.6 ..... 79.95
28-105mm Zoom ..... 99.95
28-210mm F3.5-5.6 ..... 99.95
28-300mm F4-6.3 ..... 169.95
35-105mm Zoom ..... 119.95
70-210mm Zoom ..... 79.95
75-150mm F3.5 ..... 49.95
100-300mm F5.6-6.7 ..... 99.95
100-500mm F5.6-8 ..... 395.95
1000-4000mm zoom ..... 299.95

| | | | |
|---|---|---|---|
| 1.4X | 99.95 | 2X | 29.95 |
| 1.5X | 69.95 | 1.7X | 99.95 |
| 3X | | | 69.95 |

## SIGMA

| | | | |
|---|---|---|---|
| 4.5mm F2.8 | 774.95 | 50mm F1.4 | 464.95 |
| 8mm F4 | 564.95 | 50mm F2.8 | 234.95 |
| 10mm F2.8 | 574.95 | 70mm F2.8 | 374.95 |
| 15mm F2.8 | 434.95 | 105mm F2.8 | 344.95 |
| 20mm F1.8 | 444.95 | 150mm F2.8 | 524.95 |
| 24mm F1.8 | 374.95 | 180mm F3.5 | 874.95 |
| 28mm F1.8 | 284.95 | 300mm F2.8 | 2794.95 |
| 30mm F1.4 | 474.95 | 500mm F4.5 | 4494.95 |

800mm F5.6 ..... 6984.95
10-20mm F4-5.6 ..... 444.95
12-24mm F4.5-5.6 ..... 594.95
17-70mm F2.8-4.5 ..... 324.95
18-50mm F2.8 ..... 374.95
18-50mm F3.5-5.6 ..... 134.95
18-200mm F3.5-5.6 ..... 294.95
24-70mm F2.8 ..... 464.95
28-70mm F2.8-4 ..... 94.95
28-200mm F3.5-5.6 ..... 174.95
28-300mm F3.5-6.3 ..... 234.95
35-135mm F4-5.6 ..... 99.95
50-150mm F2.8 ..... 644.95
50-500mm F4-6.3 ..... 874.95
55-200mm F4-5.6 ..... 124.95

| | | | |
|---|---|---|---|
| 70-200 F2.8 | 694.95 | 70-300 F4-5.6 | 124.95 |

70-300 F4-5.6 APO ..... 194.95
100-300mm F4-5.6 ..... 99.95
100-300mm F4 ..... 1049.95
120-400 F4.5-5.6 ..... 794.95
150-500mm F5-6.3 ..... 924.95

| | | | |
|---|---|---|---|
| 1.4X APO | 164.95 | 2X APO | 184.95 |

## TAMRON

| | | | |
|---|---|---|---|
| 14mm F2.8 | 989.99 | 90mm F2.8 | 378.95 |
| 28mm F2.5 | 99.99 | 180mm F3.5 | 628.95 |

11-18mm F4.5-5.6 ..... 434.95
17-50mm F2.8 ..... 334.94
18-200mm F3.5-6.3 ..... 244.95
18-250mm F3.5-6.3 ..... 414.95
18-270mm ..... CALL
19-35mm F3.5=4.5 ..... 159.95
28-75mm F2.8 ..... 389.95
28-80mm F3.5-5.6 ..... 68.95
28-300mm F3.8-5.6 ..... 294.95
28-300mm F3.8-5.6 VC ..... 584.95

| | | | |
|---|---|---|---|
| 55-200mm F4-5.6 | 128.95 | 75-300mm F4-5.6 | 128.95 |
| 70-200mm F2.8 | 664.95 | 200-500mm F5-6.3 | 774.95 |
| 1.4X | 124.95 | 2X | 138.95 |
| 1.4X SP | 178.95 | 2X | 208.95 |

## LIMITED SPECIALS ALL NEW ITEMS

38mm F4.5 BESELER ENLARGING LENS ..... 69.95
180mm F4.5 BRONICA SQ PS ZENZANON ..... 1199.95
250mm F5.6 BRONICA SQ PS ZENZANON ..... 1199.95
50mm F1.8 KONICA HEXANON AR LENS ..... 69.95
135mm 3.5 KONICA HEXANON AR TELE ..... 69.95
200mm F4 KONICA HEXANON AR TELE ..... 99.95
2X TELECONVERTER LEICA RANGEFINDER ..... 299.95
MAMIYA 645 145mm F4 SOFTFOCUS LENS ..... 499.95
Mamiya 350mm f5.6 APO RZ Lens ..... 2995.00
MINOLTA MAXXUM 35-70mm F3.5 ZOOM ..... 69.95
MINOLTA MAXXUM 80-200mm 4.5 ZOOM ..... 99.95
MINOLTA VECTIS 50mm MACRO LENS APS ..... 79.95
MINOLTA VECTIS 56-170mm F4.5 APS ..... 69.95
28mm 2.8 OLYMPUS ZUIKO AF WIDE ANGL ..... 99.95
YASHICA AF CAMERA 50mm f1.8 LENS ..... 69.95
50mm F1.9 YASHICA ML CONTAX ..... 39.95
PENTAX 645 120mm F4 FA MACRO LENS ..... 999.95
PENTAX 67 75mm F4.5 PENTAX WIDE ..... 599.95
PENTAX AUTO A110TELECONVERTER LENS ..... 69.95
MACRO CLOSE UP FLASH RING LIGHT ..... 99.95
WINDER MINOLTA NIKON OLYMPUS PENTAX ..... 49.95
ELMO HP-L OVERHEAD PROJECTOR ..... 99.95

## TOKINA

35mm F2.8 ..... 438.95
100mm F2.8 ..... 384.95
200mm F3.5 ..... 69.95
300mm F5.6 ..... 99.95
10-17mm F3.5-4.5 ..... 444.95
11-16mm F2.8 ..... 564.95
12-24mm F4 ..... 424.95
16-50mm F2.8 ..... 594.95
28-200mm F3.5-5.6 ..... 99.95
50-135mm F2.8 ..... 674.95
70-210mm F4-5.6 ..... 89.95
80-400mm F4.5-5.6 ..... 638.95

## B+W FILTERS

B+W UVaHAZE & KR1.5 Sky

19-58mm ..... 21.95
62mm ..... 25.95
67mm ..... 32.95
72mm ..... 43.95
77mm ..... 49.95
82mm ..... 62.50

## CIRCULAR POLARIZERS

| | | | |
|---|---|---|---|
| 37mm-52mm | 51.95 | 67mm | 84.95 |
| 55&58mm | 69.95 | 72mm | 94.95 |
| 62mm | 74.95 | 77mm | 109.95 |

## UV/IR 486 0921 093 489

| | | | |
|---|---|---|---|
| 37-48mm | 59.95 | 67mm | 119.95 |
| 49&52mm | 79.95 | 72mm | 138.95 |
| 55-62mm | 98.95 | 77mm | 164.95 |

Cokin, Heliopan, Hoya, Tiffen, Cambron – CALL

## B+W B&W and COLOR FILTERS

37mm-58mm ..... 21.95
62mm ..... 26.95
67mm ..... 33.95
72mm ..... 42.95
77mm ..... 48.95
82mm ..... 69.95

Cambron, Cokin, Heliopan, Hoya, Sundpak, Tiffen, Filters.....CALL

## DIGITAL CAMERAS, LENSES, ACCESSORIES

Canon, Casio, Fuji, Hasselblad, Kodak, Leica, Mamiya, Nikon, Olympus, Panasonic, Pentax, Polaroid, Samsung, Sigma, Sony, Vivitar - CALL

## CASES

Billingham, Domke, Lowepro, Pelican, Rimowa, Tamrac, Tenba, Zero Halliburton, Etc. – CALL

## EXPOSURE METERS

Cambron, Goslen, Kenko, Sekonic, Mimolta, Pentax, Polaris, Soligor, Wein, Etc. – CALL

## ENLARGERS

Beseler, Fujimoto, Durst, LPL, Omega, Etc. Enlarging Lenses & Accessories – CALL

## ELECT. FLASHES

Cambron, Novatron, Smithvictor, Quantum, Sunpak, Vivitar, Etc. - CALL

## SIGMA FLASHES

EF 500 Super OG ..... 194.95
EF 530 OG Super ..... 214.95
EM-140 Macro Ringlite ..... 304.95
EF 500 OG ST ..... 134.95
EF 530 OG ST ..... 164.95

## TRIPODS

Bogen, Cambron, Cullman, Berfbach, Davis&Sanford,Giottos, Impact, Gitzo, Manfrotto, Slik, Sunpak, Velbon, Etc. – CALL

## LARGE & MEDIUM FORMAT

Fuji, Cambron, Linhof, Kiev, Rollei, Rolleiflex, Bronica,Toyo, Wista, Yashica, Etc. – CALL

## PANORAMA

Widelux, Linhof, Hasselblad XPAN, Noblex, Silvestri, Etc. – CALL

## VIDEO

Canon, JVC, Panasonic, Sony, Etc. – CALL

## PROJECTORS & VIEWERS

Canon, Braun, Epson, Kodak, Kaiser, Panasonic, OptomaSanyo, Sharp, Etc. – CALL

## BINOCULARS & TELESCOPES

7X35 Sport Glass ..... 29.95
7X50 Nature ..... 54.95 10X50 Artillery ..... 49.95
20X50 Super Distance Glass ..... 69.50
8-17X40 Zoom Binoculars ..... 99.95
Bushnell Yardage Pro ..... CALL
Bushnell, Bausch&Lomb, Canon, Fuji, Fujinon, Celestron, Docter, Jason, Leitz, Leica, Minolta, Minox, Olympus, Pentax, Steiner, Swift, Tasco, Zeiss

## NEW FILM CAMERAS

CANON GOLD ELPH APS ..... 349.95
CANON EFM MANUAL EOS LENSES ..... 149.95
CANON EOS 50QD AF DATA BACK ..... 249.95
CANON EOS 88QD AF CAMERA ..... 139.95
CANON ELPH LT APS PANORAMIC ..... 59.95
CANON Z90W 28-90mm ZOOM CAPTION ..... 99.95
FUJI TW3 HALF 1/2 FRAME 35mm ..... 99.95
FUJI FUJIFILM 4000SL SLR APS ..... 199.95
KODAK ADVANTIX C800 APS ZOOM ..... 89.95
KONICA Z-UP 130E 38-130 mm ZOOM ..... 79.99
KONICA Z-UP 150E 38-130 mm ZOOM ..... 99.99
LEICA GOLD M4-2 WITH 50mm F1.4 ..... 9999.95
LEICA GOLD R3 WITH 50mm 1.4 LEN ..... 8999.95
MAMIYA GOLD RB67 90mm F3.8 LENS ..... 3999.95
MINOLTA EXPLORER AF 28-75mm ZOOM ..... 99.95
MINOLTA MAXXUM 2Xi ..... 89.95
MINOLTA MAXXUM 3XI ..... 99.95
MINOLTA MAXXUM 5Xi ..... 129.95
MINOLTA MAXXUM 7Xi ..... 169.95
MINOLTA MAXXUM SPXi 35-80mm ..... 149.95
Minolta Maxxum 300si ..... 119.99
MINOLTA MAXXUM DYNAX 303Si ..... 139.95
MINOLTA MAXXUM DYNAX 430Si ..... 169.95
MINOLTA MAXXUM DYNAX 550Si PANO ..... 199.95
MINOLTA DYNAX MAXXUM 500si 28-80 ..... 149.95
MINOLTA DYNAX MAXXUM 7000i AF ..... 169.95
MINOLTA MAXXUM HTsi AF ..... 149.95
MINOLTA XG-A TAKES MD LENSES ..... 99.95
MINOLTA VECTIS APS S-100 SLR ..... 99.95
MINOLTA VECTIS APS S-1 SLR ..... 89.95
MINOLTA VECTIS 25 APS PANORAMIC ..... 69.95
MINOLTA VECTIS 30 APS PANORAMIC ..... 69.95
MINOLTA X9 SLR TAKES MD LENSES ..... 119.95
MINOX AF MINI 35mm CAMERA DATA ..... 99.95
NIKON F-401X F401X QUARTZ BACK ..... 149.95
NIKON F50D N50D PANORAMA CAMERA ..... 189.95
NIKON FM10 35-70mm MACRO ZOOM ..... 249.95
NIKON F75 N75 AF AUTOFOCUS SLR ..... 169.95
NIKON F65 N65 AF SLR AUTOFOCUS ..... 149.95
NIKON N65 QD AF SLR CAMERA ..... 169.95
NIKON F601 AF SLR CAMERA ..... 179.95
NIKON LITE TOUCH 28mm MACRO LENS ..... 69.95
NIKON LITE TOUCH 80 MACRO PANORAM ..... 69.95
NIKON NUVIS 60 APS PANORAMIC ..... 69.95
NIKON SPORT TOUCH SLASH PROOF ..... 79.95
OLYMPUS INFINITY ACCURA 130S DATE ..... 99.99
OLYMPUS ECRU LIMITED EDITION ..... 199.95
OLYMPUS IS200 IS2 28-110mm ZOOM ..... 198.95
OLYMPUS LT-1 COMPACT AUTOFOCUS ..... 99.95
OLYMPUS SNAP i APS compact ..... 19.95
PENTAX IQZOOM 115M COMPACT ZOOM ..... 99.95
PENTAX ESPIO IQ ZOOM 115G ..... 119.95
PENTAX MZ30 SLR CAMERA ..... 149.95
PENTAX PT30 MANUAL SLR ..... 149.95
PENTAX PZ10 SLR CAMERA ..... 139.95
PENTAX PZ70QD SLR CAMERA ..... 179.95
POLAROID 636 INSTANT CLOSE UP ..... 19.95
Samsung Maxima 170GLM 35mm ZOOM ..... 99.99
VIVITAR BIG VIEW FINDER EASYVIEW ..... 19.95
Vivitar 530PZ QD 35mm ZOOM ..... 49.95
VIVITAR PZ7000 AFZOOM 35mm QUARTZ ..... 49.95
YASHICA KYOCERA 107 MULTI SLR ..... 199.95
YASHICA KYOCERA ZOOMATE 140 ZOOM ..... 79.95
YASHICA Kyocera Zoomate 165EF ..... 99.95
YASHICA MICROTEC AF ZOOM 70 AUTO ..... 59.95
YASHICA MICRO ELITE 120 ZOOM DATA ..... 89.95

## REFURBISHED FILM CAMERAS

EXAKTA RTL 1000 CAMERA W/PRISM ..... 149.95
FUJIFILM DISCOVERY 270 35-70mm ..... 49.95
MINOLTA X370 MANUAL SLR CAMERA ..... 119.95
MINOLTA MAXXUM QTSi SLR CAMERA ..... 129.95
NIKON NUVIS S APS PANAROMIC ..... 89.95
NIKON NUVIS 75i aps panoramic ..... 69.95
PENTAX EFINA 50 APS PANORAMA ..... 19.95
YASHICA 300AF SLR ..... 129.95

**email: BestDeal@CambridgeWorld.com**

The mission of Popular Photography's Checkrated Program is to give our readers the confidence they need to purchase merchandise from our Mail Order advertisers on the following pages, each of whom has agreed to abide by our guidelines listed below.

# POPULAR PHOTOGRAPHY CHECKRATED RETAILER PROGRAM

**GUIDELINES FOR OUR ADVERTISERS:**

1. All advertisements must be truthful and not misleading.
2. Must honor all advertised prices.
3. Must ship all merchandise as packaged by the manufacturers.
4. No substitutions can be made without the purchaser's consent.
5. Must specify if the product has a U.S. warranty from the manufacturer or has a store or third party warranty.
6. The invoice price must match the advertised price or the price agreed to at the time of purchase.
7. Ads for lenses must specify whether prices are for all mounts or only specific mounts.
8. Undisclosed tie-in sales where an item will be sold at the advertised price only if additional items are purchased are forbidden.

If you have difficulties with any Checkrated advertiser and are unable to solve them with the dealer, feel free to write us:

Checkrated Service Department
Popular Photography & Imaging
1633 Broadway, NY, NY 10019
(checkrated@hfmus.com)

**VISIT WWW.POPPHOTO.COM FOR OUR NEW BUYER'S GUIDE.**

You'll get all the must-know product info, objective reviews, independent test results, pricing and user ratings you'll need to make a totally confident purchase and buy directly from our Checkrated retailers.

These stores have agreed to adhere to the terms of our Checkrated Buyer's Program:

Abe's Cameras & Electronics / Adorama / B&H Photo-Video / Beach Camera / Calumet / Buy Dig DigiCombos / Newegg.com / Samy's Camera / Tri-State Camera & Video

# The new home for Home Theater

Samsung 52" 650 Series Black with Touch Of Color

- TV's
- LCD
- Plasma
- DVD Players
- Blu-Ray

ADORAMA
THE PHOTOGRAPHY PEOPLE

Panasonic SONY TOSHIBA SAMSUNG SHARP AUDIOVOX COBY. Haier

42 W. 18th St. NY, NY 10011 | www.adorama.com | 800.223.2500

# Samy's Camera

QUALITY SERVICE SINCE 1976

**(888) SAMYSCAMERA** (888) 726-9722

**OPEN 7 DAYS!**
MAIL ORDER HOURS:
MON.-FRI. 7am-7pm PST
SAT. 9:30am-6pm PST
SUNDAY 10am-5pm PST

**WWW.SAMYS.COM**
ALL MAJOR CREDIT CARDS ACCEPTED!
NO SALES TAX
ON ORDERS SHIPPED OUT OF CA.!
OVERNIGHT SHIPPING AVAILABLE!

## BONUS! FREE CASE, TRIPOD & INSTRUCTIONAL DVD
WITH SLR KIT PURCHASE! (most manufacturers)

## Nikon
Nikon Authorized Dealer ■

### D90 NEW!
RECORD CINEMATIC-QUALITY MOVIE CLIPS AT UP TO 720P HD
- Continuous shooting as fast as 4.5 frames per second
- ow noise ISO sensitivity from 200 to 3200
- 3-inch super-density LCD monitor

12.3MP

FREE PHOENIX FLASH with D40 purch.

### D40
INCREDIBLE PICTURES... EVEN EASIER
- Easy operation with intuitive controls
- Nikon's smallest digital SLR ever at just over 16 ounces
- Fast startup with instant shutter response

6.1MP

### D60
10.2MP
ACTIVE DUST REDUCTION SYSTEM
10.2-megapixel DX-format CCD imaging sensor and exclusive EXPEED image processing concept provide added cropping freedom and the ability to make larger prints.

FREE PHOENIX FLASH with D60 purch.

### D300
EXCEPTIONAL AGILITY INSPIRED PERFORMANCE
- New 12.3-megapixel DX-Format CMOS Sensor
- 3.0-inch super density 920,000-dot VGA color monitor
- Continuous shooting up to 6 frames per second

12.3MP

**#1 Rated** by a leading consumer magazine

### D700
PROFESSIONAL IMAGE QUALITY WITH LOW-NOISE, HIGH-ISO PERFORMANCE
- Nikon's exclusive EXPEED digital image processing
- Broad ISO sensitivity up to 6400 and incredibly low noise

12.1MP

## COOLPIX
NEW TOUCH PANEL LCD!

8.1MP / 3xZM

### COOLPIX S210
- New EXPEED image processor ensures high-quality pictures with stunning color & sharpness
- Electronic VR Image Stabilization

NEW! 10MP / 5xZM

### COOLPIX S60
- Bright 3.5-inch High Resolution TOUCH PANEL LCD offers 160° Wide-Angle of Views
- Optical VR Image Stabilization
- New EXPEED Image Processing

14.5 MEGAPIXELS!

NEW! 14.5MP / 6xZM

### COOLPIX S710
- 3.6x Wide-Angle Optical Zoom
- New EXPEED image processing
- Bright 3" High Resolution LCD
- Optical VR Image Stabilization

13.5 MEGAPIXELS!

NEW! 13.5MP / 4xZM

### COOLPIX P6000
- 4x Wide Angle Optical Zoom
- Program, Aperture, Shutter, and Manual Exposure Modes
- Optical VR Image Stabilization

ALL NIKON ADVERTISED MERCHANDISE INCLUDES NIKON USA 1 YEAR LIMITED WARRANTY REGISTRATION CARD. AUTHORIZED NIKON DEALER. NIKON USA INC.

## OLYMPUS
FREE 7" Digital Frame with Olympus DSLR purchase

### E-420
THE WORLD'S SMALLEST DIGITAL SLR IS HERE.
- Dust Reduction System
- Quick start-up, blazing write speeds and a burst shooting rate of 3.5 fps.
- Live View 2.7" HyperCrystal™ II LCD
- Now with Face Detection technology

10.1MP

### E-520
BUILT-IN IMAGE STABILIZATION
- Autofocus Live View brings subjects into sharp focus
- Face detection
- Shadow adjustment technology
- Dust reduction

10MP

### E-3
WORLD'S FASTEST AF TECHNOLOGY
- When coupled with three new Zuiko digital lenses, the E-3 offers unmatched AF speeds
- In-Body Mechanical Image Stabilization

10MP

## Panasonic

### DMC-TZ5
28MM WIDE ANGLE LENS
- LEICA 28mm Wide-Angle Lens with 10x Optical Zoom
- Intelligent Auto Mode
- Bright 3" LCD with Intelligent LCD Function

Call for Special Price!

9.1MP / 10xZM

### DMC-FZ28
27MM WIDE-ANGLE LEICA LENS
- Enhanced Intelligent Auto Mode (iA), with the new AF (auto focus) Tracking function, which also improves Face Detection (up to 15 faces)

10.1MP / 18xZM

## Leica

10.7MP / 4xZM

NEW! 10MP / 4xZM

### C-LUX 3 $599.95
SMALL, SLIM, AND ELEGANT
- Automatic scene recognition
- Powerful zoom lens

### D-LUX 4 $849.95
COMPACT SIZE WITH PLENTY OF ARTISTIC FREEDOM
- High-aperture lens that allows you to work with an open shutter,

### M8.2
DISCREET AND QUIET, OPERATING WITH SPEED AND PRECISION

10MP

- Low vibration, extra quiet focal plane shutter with the option to re-cock the shutter at a more convenient moment

## EPSON
REBATE INFO: WWW.SAMYS.COM

### Stylus PRO 4880
ULTRACHROME K3™ INK
- Features Epson's breakthrough pigment ink technology, UltraChrome K3™ ink with Vivid Magenta and improved image processing
- BorderFree™ roll printing

Large archival photos

### Stylus Photo R2880
EXHIBITION QUALITY PRINTS
- Epson UltraChrome K3™ with Vivid Magenta pigment inkset
- Large-format photos worthy of gallery display

### Stylus PRO 3800
17" WIDE DESKTOP PRINTER
- Professional, cut-sheet media from 4x6 to 17x22
- 8-color Epson UltraChrome K3™ Ink
- Auto-sharing Photo and Matte Black ink technology

## Canon

$100 INSTANT REBATE through 1/17/09

### EOS 50D
BRIDGES THE GAP BETWEEN THE NOVICE AND THE SEASONED PRO
- New 15.1 Megapixel CMOS sensor with improved noise reduction, wide range ISO 100-3200, 14-bit conversion
- Next generation DIGIC 4 Image Processor for faster processing
- 3.0-inch Clear View LCD
- Enhanced Live View shooting includes Face Detection Live mode

15.1MP

FREE PHOENIX FLASH with XS purch.

### EOS REBEL XS
FAST AND SIMPLE
- DIGIC III processor
- High-speed, wide-area 7-point AF with center cross-type sensors
- Auto Lighting Optimizer for highlight/shadow control

NEW!

10.1MP

### EOS 40D DIGITAL
LIVE VIEW FUNCTION
- Large 3.0-inch LCD monitor and advanced Live View Function
- 6.5 fps, burst rate up to 75 consecutive JPEGs or 17 RAW images and DIGIC III Image Processor
- Magnesium-alloy exterior

10.1MP

NEW! EOS 5D Mark II

FULL HD VIDEO CAPTURE AT 1920 X 1080 RESOLUTION FOR UP TO 4GB PER CLIP WITH HDMI OUTPUT FOR HD VIEWING OF STILLS AND VIDEO.

21.1MP

### EOS-1Ds Mark III
21.1MP
EOS REBORN.
SUPERB IMAGE QUALITY
- Entirely new 21.1 MP Full-Frame Canon CMOS Sensor, 14-bit A/D conversions for outstanding color tones, and Highlight Tone Priority.

lens not included

## PowerShot

10MP / 4xZM

### PowerShot A1000IS
SLIM, LIGHT, EASY TO USE
- DIGIC III Imaging Processor with ISO 1600
- Face Detect with Auto Focus, Auto Exposure, motion detection

10MP / 6xZM

### PowerShot A2000IS
3.0 INCH SCREEN
- DIGIC III Imaging Processor with ISO 1600
- Face Detect Technology

NEW! 14.7MP / 3.7xZM

### PowerShot SD990IS
- Optical Image Stabilizer
- 2.5" PureColor LCD II screen
- DIGIC 4 Image Processor

NEW! 14.7MP / 5xZM

### PowerShot G10
- 28mm wide-angle lens
- Optical Image Stabilizer
- RAW + JPEG modes

ALL CANON ADVERTISED MERCHANDISE INCLUDES CANON USA 1 YEAR LIMITED WARRANTY REGISTRATION CARD

## Canon HD High Definition

DUAL FLASH MEMORY

### VIXIA HF11
- 32GB internal Flash drive and SDHC Card Slot
- 3.3 Megapixel Full HD CMOS Image Sensor
- Canon Exclusive: DIGIC DV II Image Processor
- 1920 x 1080 Full HD Recording

$100 INSTANT REBATE thru 12/31/08

### Canon FS100
Flash Memory Camcorder
- Affordable Flash Memory in a Compact Size
- Canon 48x Advanced Zoom
- DIGIC DV II Image Processor
- 2.7" Widescreen LCD

### Canon HG20
High Definition Camcorder
- High Definition Video on a 60GB Hard Disk Drive
- Record HD Video Directly to SDHC Memory Cards
- 3.3 MP HD CMOS Image Sensor

### Canon VIXIA HV30
High Definition Camcorder
- HD Video lens, 10x optical/ 200x digital zoom
- Full HD CMOS Sensor
- SuperRange Optical Image Stabilization
- 24p Cinema Mode for a professional "film-look"

### Canon VIXIA HF100
High Definition Camcorder
- Flash Memory offers enhanced data protection, fast response time, flexible media exchange and low power consumption
- SuperRange Optical Image Stabilizer

### Canon HG21
High Definition Hard Disk Drive Camcorder
- 120GB of in-built storage
- True Progressive HD CMOS sensor
- Optical Image Stabilizer

### Canon HR10 HD DVD Camcorder
- AVCHD DVD in a Compact Size
- Full HD CMOS Sensor
- DIGIC DV II

### Canon XL H1A HD CAMCORDER
The XL H1A has a wider range of image control settings and options, combined with the new Genuine Canon 20x HD Video Zoom Lens III with Professional L Series Fluorite

NEW!

## ACCESSORIES

SanDisk Extreme III Lexar Professional

Receive a Sandisk VISA Prepaid Card when you stock up & save on Sandisk Extreme Memory Cards!

EXTREME IV CF 8GB
BUY 1 - GET $40 BACK
BUY 2 - GET $95 BACK
BUY 3 - GET $150 BACK
Offer ends 1/17/09

Many bags, cases & backpacks IN STOCK!

Lowepro Think Tank photo

## Tokina
11-16mm f/2.8
An ultra-wide angle lens with a fast f/2.8 aperture for better photography in low-light situations

TAMRON Authorized USA Dealer — ALL TAMRON LENSES COME WITH TAMRON'S 6-YEAR WARRANTY

AF28-300mm F/3.5-6.3 XR Di VC (Vibration Compensation)
Blur-Stopping Power With No Annoying Motion Delay In Your Viewfinder!

AF18-270mm F/3.5-6.3 Di II VC
The world's largest zoom ratio of 15X

**CASH PAID FOR USED EQUIPMENT!** CALL GEORGE @ 323 938-2420 x1293 M-F 9am-4pm PST • Sat. 10am-4pm PST

WWW.SAMYS.COM COMPLETELY RE-DESIGNED!!

*(R)=refurbished *(O)=open box *(D)=discontinued

PRICES SUBJECT TO CHANGE WITHOUT NOTICE. SUBJECT TO STOCK ON HAND. NOT RESPONSIBLE FOR TYPOGRAPHICAL ERRORS. PRICES GOOD FOR MAIL ORDER ONLY.

POPULAR PHOTOGRAPHY JANUARY 2009

# ABE'S OF MAINE

SINCE 1979! CAMERAS AND ELECTRONICS

5 FERNWOOD AVE, RARITAN CENTER, EDISON, NJ 08837

CELEBRATING OVER 25 YEARS IN BUSINESS

FAX 1-718-228-8727

C.O.D.

CALL TOLL FREE 1-800-227-0400

OPEN SUNDAY

or 718-645-1818

HOLIDAY HOURS
Mon.-Thurs. 9:30AM-10:30PM
After Thanksgiving 9:30AM-11:00PM
Friday 9:30AM-5:00PM
Saturday Closed
After Thanksgiving Sat. 5:00PM-11:00PM
Sunday 10:00AM-7:00PM

ORIGINALLY FROM OLD ORCHARD BEACH, MAINE

Orders and Inquiries can now be E-Mailed to us at: info@abesofmaine.com

WORLDWIDE SHIPPING

ALL MERCHANDISE IS BRAND NEW & FACTORY FRESH!

# www.abesofmaine.com

## DIGITAL CAMERAS

### NIKON D90 DIGITAL SLR
W/18-105MM VR LENS KIT

- 12.3 Megapixel Digital SLR
- Auto-Actived Lighting
- In Camera Image Editing
- 4.5 Frames Per Second
- 3" LCD Monitor

**In Stock!**

### NIKON COOLPIX S60
NEW!

- 10 Megapixel Digital Camera
- 5X Optical Zoom
- Expeed Image Processing
- 3.5" LCD Screen
- Optical VR Image Stabilization

**In Stock!**

### NIKON DIGITAL CAMERAS

| | | | |
|---|---|---|---|
| D700 | NEW! | Coolpix S550 | Low Price! |
| D300 | In Stock! | Coolpix S2100 | Low Price! |
| D200 | In Stock! | Coolpix L18 | NEW! |
| D80 | In Stock! | Coolpix P80 | In Stock! |
| D40 | In Stock! | Coolpix S60 | In Stock! |
| D60 | Low Price! | Coolpix S610 | In Stock! |
| D90 | CALL! | Coolpix S710 | In Stock! |
| D90 w/18-105mm | CALL! | Coolpix S560 | In Stock! |
| Coolpix S210 | NEW! | Coolpix S6000 | In Stock! |

### SONY DSLR-A300
10.2 MEGAPIXEL DIGITAL SLR W/18-70MM LENS

- Optical Image Stabilization
- Bionz Image Processor
- 2.7" LCD Screen

**$499.99**

### SONY DSC-T700

- 10 Megapixel Digital Camera
- Carl Zeiss Lens
- Optical Image Stabilization

**$334.99**

### SONY DIGITAL CAMERAS

| | | | |
|---|---|---|---|
| DSC-H10 | IN STOCK! | DSLR-A350 | New Low Price! |
| DSC-H50 | CALL! | DSLR-A700 (all Kits) | IN STOCK! |
| DSC-T300 | 249.99 | DSC-W120 | IN STOCK! |
| DSC-T77 | 259.99 | DSC-W130 | IN STOCK! |
| DSC-T500 | NEW! | DSC-W150 | IN STOCK! |
| DSC-T700 | NEW! | DSC-W170 | CALL! |
| DSLR-A300 | 539.99 | DSC-W300 | CALL! |
| DSLR-A200 | IN STOCK! | | |

### CANON EOS 50D

- 15.1 Megapixel Digital SLR
- Digic 4 Image Processor
- 9 Cross-Type High Precision Sensor
- 3" LCD Screen

**In Stock!**

### CANON POWERSHOT SD1100 ALL COLORS

- 8 Megapixel Camera
- Optical Image Stabilization
- 4X Digital Zoom
- 3X Optical Zoom
- 2.5" LCD Screen

**$159.99**

### CANON DIGITAL CAMERAS

| | | | |
|---|---|---|---|
| EOS Rebel XS | IN STOCK! | PS A1000 all clrs | NEW! |
| EOS Rebel XSi | IN STOCK! | PS E1 all clrs | NEW! |
| PS G10 | IN STOCK! | PS A590 | NEW! |
| SD880IS | IN STOCK! | PS A470 | Low Price! |
| PS SD960IS | IN STOCK! | EOS 5D | CALL! |
| PS 950 IS | IN STOCK! | EOS 5D Mark II | CALL! |
| SD890 IS | IN STOCK! | EOS 50D | NEW! |
| SD790 IS | Low Price! | EOS 1DS III | CALL! |
| SD770 IS | Low Price! | EOS 1D Mark III N | CALL! |
| PS A2000 | NEW! | | |
| Powershot SX110IS Black & Silver | IN STOCK! | | |

### KODAK Z1012IS

- 10.1 Megapixel Digital Camera
- 32 MB Internal Memory
- 12X Optical Zoom
- 2.5" LCD Screen

**$219.99**

### KODAK Z1085

- 10 Megapixel Digital Camera
- Optical Image Stabilization
- High ISO Mode
- 5X Optical Zoom

**In Stock!**

### KODAK DIGITAL CAMERAS

| | |
|---|---|
| Z1285 | IN STOCK! |
| Z8612 | CALL |
| M1033 (all colors) | IN STOCK! |
| V1253 | IN STOCK! |
| Z1085 | IN STOCK! |
| V1073 | 159.99 |

### PENTAX K200D
10.2 MEGAPIXEL DIGITAL SLR BODY

- 16 Segment Metering
- 2.7 High Resolution Screen

**IN STOCK!**

### PENTAX K20D

- 14.6 Megapixel Digital SLR
- Prime Image Processing
- 2.7" LCD Monitor
- Weather & Dust Resistant Body

**IN STOCK!**

### PENTAX DIGITAL CAMERAS

| | |
|---|---|
| Optio W60 | IN STOCK! |
| Optio M50 All Colors | 124.99 |
| Optio W30 | 194.99 |
| Optio S12 | NEW! |
| K100D Super | IN STOCK! |
| K20D 2w/18-55mm II Lens | New Low Price! |
| K20D | NEW! |
| K200D | NEW! |
| K20D w/16-45mm Lens | IN STOCK! |

### PANASONIC DMC-FZ28

- 10.1 Megapixel Camera
- 18X Optical Zoom Lens
- 2.7" LCD Screen

**$279.99**

### PANASONIC DIGITAL CAMERAS

| | |
|---|---|
| DMC-FX37 All Colors | IN STOCK! |
| DMC-FX35 All Colors | IN STOCK! |
| DMC-TZ4 all colors | 189.99 |
| DMC-TZ5 all colors | 224.99 |
| DMC-FS5 all colors | IN STOCK! |
| DMC-FX10 all colors | IN STOCK! |
| DMC-LX3 | CALL! |
| DMC-FX500 (black, silver) | 279.99 |
| DMC-FS20 all colors | 179.99 |
| TZ-50 | IN STOCK! |

### FUJI FINEPIX Z1000FD

- 10 Megapixel Digital Camera
- 12X Optical Zoom Lens
- Face Detection Technology

**$174.99**

### FUJI DIGITAL CAMERAS

| | |
|---|---|
| Finepix S8100 | IN STOCK! |
| Finepix F60FD | NEW! |
| Finepix Z20 | CALL! |
| Finepix Z200 | NEW! |
| Finepix F100 | IN STOCK! |
| Finepix S1000 | New Low Price! |
| Finepix S2000 | IN STOCK! |

### OLYMPUS SP-565

- 10 Megapixel Digital Camera
- Wide Angle 20X Optical Zoom Lens
- 13.5 FPS High Speed Shooting

**$319.99**

### OLYMPUS DIGITAL CAMERAS

| | |
|---|---|
| E510 | IN STOCK! |
| E420 | IN STOCK! |
| E520 | IN STOCK! |
| Stylus 850SW all colors | IN STOCK! |
| Stylus 1030 | IN STOCK! |
| SP-570 | IN STOCK! |

## 30 DAY MONEY BACK GUARANTEE

## NO RESTOCKING FEE!

## CAMCORDERS

### SONY HVR-Z1U
3 CCD High-Def Camcorder

- Carl Zeiss Lens
- 12X Optical Zoom
- Optical Super Steadyshot

**$3699.99**

Price After $400 Mail-in Rebate

### SONY HDR-SR12
120 GB HDD Camcorder

- 10.2 Megapixel Digital Resolution
- 12X Optical Zoom
- 150X Digital Zoom
- 3.2" LCD Screen

**New Low Price!**

### SONY HDR-CX12
Memory Stick Pro Duo Handycam

- 1920x1080 Resolution
- 10.2 Megapixel Still Image Capture
- 2.7" LCD Screen
- 12X Optical Zoom

**IN STOCK!**

### SONY CAMCORDERS

| | | | |
|---|---|---|---|
| DCR-DVD610 | IN STOCK! | HVR-Z7U | IN STOCK! |
| DCR-DVD910 | NEW! | HVR-V1U | IN STOCK! |
| DCR-DVD810 | NEW! | HVR-M15 | IN STOCK! |
| DCR-DVD710 | NEW! | HVR-M25 | 2849.99 |
| DCR-SR45 | NEW! | HVR-HD1000 | IN STOCK! |
| DCR-SR65 | NEW! | HDR-HC9 | IN STOCK! |
| DCR-SR85 | NEW! | HDR-SR10 | NEW! |
| HDR-TG1 | 649.99 | HDR-SR11 | NEW! |
| HVR-A1U | CALL! | HDR-SR12 | NEW! |
| HVR-Z1U | 4049.99 | | |

### CANON XL-2
$300 Mail-In Rebate

3 CCD Mini DV Camcorder

- 16:9 and 4:3 Aspect Ratio Shooting Formats
- XL Mount Interchangeable Lens
- Variable Frame Rate
- Optical Image Stabilization
- 20X Optical Zoom
- Color EVF with 2" LCD

**CALL!**

### CANON GL-2
$250 Mail-In Rebate

3 CCD MiniDV Recording

- 20X Optical Zoom • 100X Digital Zoom
- Optical Image Stabilizer
- 1.7 Megapixel Digital Still
- IEEE 1394 In/Out Terminal
- Manual Auto Level Control

**New Low Price!**

### CANON VIXIA HV-30
24P Cinema Mode

- Color Viewfinder
- 2.7 LCD Screen

**New Low Price!**

### CANON CAMCORDERS

| | | | |
|---|---|---|---|
| HV30 | IN STOCK! | HG20 | NEW! |
| DC330 | IN STOCK! | HF10 | IN STOCK! |
| ZR850 | IN STOCK! | HF11 | IN STOCK! |
| ZR930 | IN STOCK! | HF100 | New Low Price! |
| ZR950 | IN STOCK! | FS10 | IN STOCK! |
| HX-A1 | 3199.99 | FS11 | IN STOCK! |
| HG10 | CALL! | FS100 | IN STOCK! |
| HG20 | NEW! | | |

### JVC GZ-MG365
60 GB Hard Drive Camcorder

- 35X Optical Zoom
- 800X Digital Zoom
- 2.7" Widescreen LCD

**In Stock!**

### JVC CAMCORDERS

| | |
|---|---|
| GZ-MG330 All Colors | New Low Price! |
| GZ-MG335 | IN STOCK! |
| GZ-MG360 | New Low Price! |
| GZ-MG365 | 399.99 |
| GZ-HD10 | IN STOCK! |
| GZ-HD30 | IN STOCK! |
| GZ-HD40 | IN STOCK! |
| GH-HD110 | CALL! |

### PANASONIC SDR-H40
40GB HD Camcorder

- SD Memory Card Slot
- Optical Image Stabilization
- 42X Optical Zoom

**$319.99**

### PANASONIC CAMCORDERS

| | |
|---|---|
| SDR-H60 | CALL! |
| SDR-H40 | IN STOCK! |
| SDR-SW20 | IN STOCK! |
| HDC-SD9 | NEW! |
| HDC-HS100 | IN STOCK! |

### PANASONIC PRO CAMCORDERS

| | | | |
|---|---|---|---|
| AG-DVX100B | CALL! | HDC-DX1 | IN STOCK! |
| AG-DVX200 | IN STOCK! | | |

### HITACHI CAMCORDERS

| | | | |
|---|---|---|---|
| DZ-HS300 | IN STOCK! | DZ-HS500 | 369.99 |

## 35MM

### NIKON FM10K
MANUAL FOCUS BODY
W/35-75MM LENS

**$234.99**

### CANON EOS REBEL T2 KIT

Body with electronic flash with Canon 28-90 III 4.0-5.6 Lens

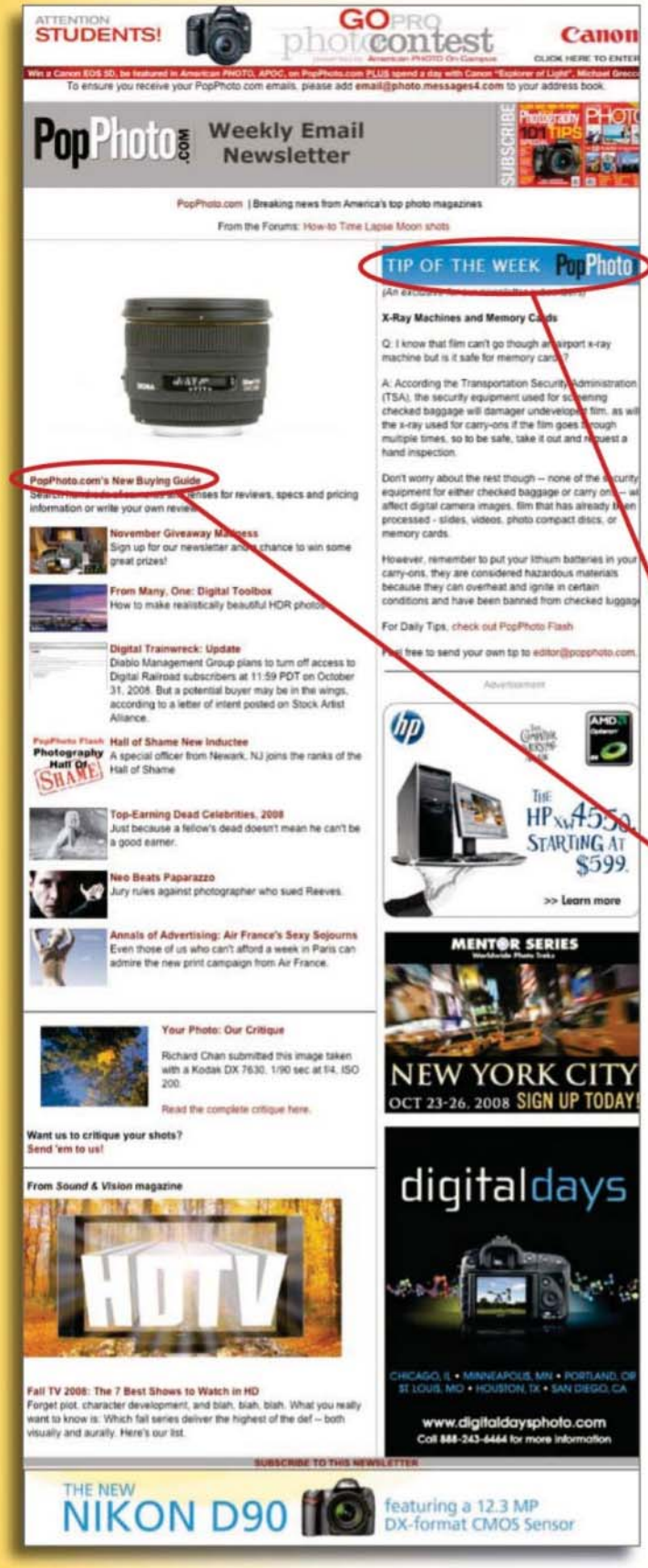
**$237.99** USA Warrantied

**WE CARRY A FULL LINE OF SLR BODIES, LENSES, AND FLASHES**

**WE CARRY A FULL LINE OF LARGE SCREEN TVS, LAPTOPS, PRINTERS, PROJECTORS, AUDIO, GPS, SMALL HOME APPLIANCES, VCR'S, and DVD PLAYERS**

**Please visit our website or call us toll free for product information.**

COMPANY POLICY. To order use Visa, Mastercard, American Express, Diners Club, Discover, Carte Blanche. COD orders welcomed or mail in Bank, Cashiers or Certified Checks. For Personal Checks and Money Orders please allow at least 4 weeks from the date we deposit your check. Minimum shipping charges $7.90. For cost of merchandise up to $500-6% and for cost of merchandise from $600-$1,000-5.5% and for merchandise $1,100 and up-5%. Products may have International Warranty, USA Warranty may be additional. All merchandise is brand new. No restocking fee on returns providing merchandise is returned in mint condition within a 21 day trial period (7 days for video and audio products). Quantities Limited. Pictures are for illustration only. Not responsible for typographical errors. Prices are Valid Until End of Monthly Issue, and are subject to verifiable Manufacturer's price changes. Call toll free. Sorry, No Dealers. We reserve the right to limit quantities. (†) = Import Model. DCA# 0898874.


ATTENTION STUDENTS!
GO PRO photo contest
Canon
CLICK HERE TO ENTER
To ensure you receive your PopPhoto.com emails, please add email@photo.messages4.com to your address book.
PopPhoto.com Weekly Email Newsletter
SUBSCRIBE
PopPhoto.com | Breaking news from America's top photo magazines
From the Forums: How-to Time Lapse Moon shots
TIP OF THE WEEK PopPhoto
X-Ray Machines and Memory Cards
Q: I know that film can't go though an airport x-ray machine but is it safe for memory cards?
A: According the Transportation Security Administration (TSA), the security equipment used for screening checked baggage will damager undeveloped film, as will the x-ray used for carry-ons if the film goes through multiple times, so to be safe, take it out and request a hand inspection.
Don't worry about the rest though -- none of the security equipment for either checked baggage or carry ons -- will affect digital camera images, film that has already been processed - slides, videos, photo compact discs, or memory cards.
However, remember to put your lithium batteries in your carry-ons, they are considered hazardous materials because they can overheat and ignite in certain conditions and have been banned from checked luggage.
For Daily Tips, check out PopPhoto Flash
Feel free to send your own tip to editor@popphoto.com.
PopPhoto.com's New Buying Guide
November Giveaway Madness
Sign up for our newsletter and a chance to win some great prizes!
From Many, One: Digital Toolbox
How to make realistically beautiful HDR photos
Digital Trainwreck: Update
Diablo Management Group plans to turn off access to Digital Railroad subscribers at 11:59 PDT on October 31, 2008. But a potential buyer may be in the wings, according to a letter of intent posted on Stock Artist Alliance.
PopPhoto Flash Photography Hall Of SHAME
Hall of Shame New Inductee
A special officer from Newark, NJ joins the ranks of the Hall of Shame
Top-Earning Dead Celebrities, 2008
Just because a fellow's dead doesn't mean he can't be a good earner.
Neo Beats Paparazzo
Jury rules against photographer who sued Reeves.
Annals of Advertising: Air France's Sexy Sojourns
Even those of us who can't afford a week in Paris can admire the new print campaign from Air France.
Advertisement
hp
AMD
THE HP xw4550 STARTING AT $599.
>> Learn more
MENTOR SERIES
NEW YORK CITY
OCT 23-26, 2008 SIGN UP TODAY!
Your Photo: Our Critique
Richard Chan submitted this image taken with a Kodak DX 7630. 1/90 sec at f/4, ISO 200.
Read the complete critique here.
Want us to critique your shots?
Send 'em to us!
From Sound & Vision magazine
HDTV
Fall TV 2008: The 7 Best Shows to Watch in HD
Forget plot, character development, and blah, blah, blah. What you really want to know is: Which fall series deliver the highest of the def -- both visually and aurally. Here's our list.
digitaldays
CHICAGO, IL • MINNEAPOLIS, MN • PORTLAND, OR
ST LOUIS, MO • HOUSTON, TX • SAN DIEGO, CA
www.digitaldaysphoto.com
Call 888-243-6464 for more information
SUBSCRIBE TO THIS NEWSLETTER
THE NEW NIKON D90
featuring a 12.3 MP DX-format CMOS Sensor

# discover the world of photography on POPPHOTO.COM

AMERICAN PHOTO & POPULAR Photography

have teamed up online to bring you the latest news, reviews, how-tos and inspiration right to your inbox.

Don't miss the **Photo Tip of the Week**, a new exclusive feature for our newsletter subscribers.

Check out the new **Buying Guide.** All the must-know info you can't get anywhere else. Also **add your own reviews** and buy directly from our participating checkrated retailers.

**Sign up for our free weekly e-mail newsletter!**

Please visit
**www.popphoto.com/newsletter**
for more information.

PopPhoto.com ONLINE HOME OF POPULAR PHOTOGRAPHY & IMAGING AND AMERICAN PHOTO

Wishing All Our Customers a Happy and Healthy Holiday Season

# BEACH CAMERA®

Where the Customer Always Comes First

**1-800-634-1811**

Toll-free Customer Service 800-634-1811 Dial 2 or email us at CS@beachcamera.com
Retail Showroom: **732-968-6400**
203 Route 22 East Green Brook, NJ 08812

Sunday.....10:00am-7:00pm Mon-Thurs ..... 9:30am-9:00pm Friday ..... 9:30am-2:00pm
All products are brand new, factory fresh and include USA warranty!

**www.beachcamera.com**

BizRate 2008 Award Winner

## Digital Photography

Nikon Authorized Dealer — all Nikon products include full Nikon USA warranty!

### COOLPIX L18
*At the heart of the image.*

**Memories Made Easy**

The 8MP L18 sports a 3x Zoom-NIKKOR lens for creative compositional freedom, a huge and bright 3" LCD screen for sharing images, and Anti-shake AE for images with outstanding clarity. It is equipped with an Easy Auto Mode, Face-priority AF and numerous other features allowing the user to enjoy carefree shooting without having to adjust any settings or controls.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

### COOLPIX P80

**Close Encounters**

The 10 megapixel P80's incredible 18x Zoom-NIKKOR lens covers focal lengths from 27-486mm (35mm format equivalent). To ensure steady shots while utilizing the zoom capabilities, the COOLPIX P80 is equipped with Optical Vibration Reduction (VR). A light sensitivity range up to ISO 6400 and numerous mode dials will satisfy the needs of camera enthusiasts everywhere.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

### COOLPIX S610c

**Incredible digital – Unwired**

In addition to an innovative Wi-Fi sharing feature, the Coolpix S610c boasts 10 megapixels, a 3.6x Zoom-NIKKOR wide-angle glass lens, and a 3" LCD screen. The S610c features an Optical Vibration Reduction (VR) Image Stabilization system and ISO up to 3200, enhancing the camera's low-light performance. A leader in speed, the COOLPIX S610c starts-up in 0.7 seconds, a class leading start-up time.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

### D60

**Stunning Photography is Just a Step Away**

The compact 10.2-MP D60 delivers breathtaking picture quality and the versatile handling of a D-SLR, yet is incredibly compact, easy and fun to use. It features fast startup and split-second shutter response. Nikon's Active Dust Reduction System activates automatically, along with Airflow Control technology to reduce the amount of dust that reaches the sensor.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

### D90 Digital SLR — NEW!

**Engineered for Artistry, Unleash your Potential**

The D90 is the world's first digital SLR camera with a movie shooting function that delivers genuinely cinematic results, enhanced by the creatively shallow depth of field made possible by the DX-format sensor. This is further refined by the optical quality and broad selection of NIKKOR lenses - the same lenses relied upon by professional photographers the world over.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

### D700 Digital SLR — NEW!

**Power that Empowers**

The D700 offers pro-level performance and an extensive array of features and innovations in a comfortably nimble platform. In addition to the Nikon-original FX-format CMOS sensor, the D700 incorporates Nikon's EXPEED Image Processing System, Nikon's renowned 51-point auto focus system with 3D Focus Tracking, Scene Recognition & a new active dust reduction system, two Live View shooting modes and more.
Nikon, Inc. limited warranty included 2008 Nikon Inc.

**CALL OR LOG ONTO WWW.BEACHCAMERA.COM FOR UP-TO-THE MINUTE REBATES, PRICING AND CURRENT PROMOTIONS.**

## Digital SLR's

### Canon — NEW!

**$100 Instant Rebate when purchased together with 75-300 III Lens thru 1/17/09**

Also Available in Black

**EOS DIGITAL REBEL XS**

**Power Made Simple**

For perfect photos, fast and simple, there's nothing better than Canon's new EOS Rebel XS. With powerful features including a 10.1-megapixel CMOS Sensor, Canon's DIGIC III processor, fast shooting and more, it's a digital powerhouse. With simple, easy-to-use controls, a compact design, a 2.5-inch LCD monitor, and Live View Function, it's a beginner's dream come true.

### OLYMPUS

**E-520**

**Official Camera of the US Open**

The new Olympus E-520 D-SLR incorporates a built-in image stabiliser to ensure blur-free shots irrespective of the lens attached. Matched with the Supersonic Wave Filter dust protection system and improved Live View capabilities, the freedom to frame and take great, crystal-clear photos is virtually limitless.

### PENTAX

Free Gadget Bag Warranty and 4GB Memory Card

**K200D**

**Non shake, Non rattle and Non roll**

With 10.2 megapixels, the K200D DSLR features many of the advancements that are incorporated in the PENTAX K200D, including a 2.7 inch LCD monitor, Custom Image functions for perfect control over how images are developed, and the Expanded Dynamic Range function. It includes a user-friendly Dust Removal system, 11-point SAFOX VIII auto focus system, sophisticated 16-segment multi-pattern metering and auto sensitivity control up to ISO 1600.

### TAMRON

IN STOCK

**AF 18-200 f3.5-6.3 XR Di II LD Aspherical (IF) Macro**

**The Powerful Zoom Range Exclusively for Digital SLR's**

The new AF18-200 is a high power zoom lens made for exclusive use with digital SLR cameras. It covers a powerful zoom range equivalent to 28-300mm on a digital SLR camera with a smaller-size imager. The lens provides the convenience of handling many photographic scenes and the capability of shooting ultra wide-angle to ultra telephoto shots without changing lenses.

## Camcorders

### Canon

*imageANYWARE*

THE OFFICIAL CAMCORDER OF Life

**ZR950**

**Affordable Performance**

The ZR950 is the top of the line of ZR camcorders. This latest addition to the ZR family also includes an array of features that turn your camcorder into a digital still camera, including 9 Point AiAF (Auto Focus), Progressive Photo, Simultaneous Photo Recording, Special Scene Modes, and Image Effects. It is also compatible with SD HC (High Capacity) memory cards for storing even more of your images.

**FS100**

**Flash Memory in a Compact Size**

Now, with the light, compact Canon FS100, you can have stunning video with the ease and numerous benefits of Flash Memory, at an affordable price. Flash Memory is used in some of the world's most innovative electronic products such as laptop computers, MP3 players, PDAs and cell phones. It's just the thing for catching more of your life's most special moments.

**Vixia HF10** — FULL HD 1080

**Setting a New Standard for High Definition**

Now, with the light, compact Canon VIXIA HF10, you can have stunning AVCHD (Advanced Video Codec High Definition) format recording with Dual Flash Memory- record to both the camcorder's 16 GB internal memory and a removable SDHC card, extending your available recording space and offering added flexibility in file transfer and playback.

**Vixia HV30** — FULL HD 1080

**Elegant Design, Ultimate HDV**

The dramatic VIXIA HV30 is the latest in Canon's offering of HD camcorders, incorporating Canon Exclusive features you won't find anywhere else. Full HD CMOS sensor and advanced DIGIC DV II image processor deliver breathtaking detail and the best in color reproduction. SuperRange Optical Image Stabilization and Instant Auto Focus gives you the shot control High Definition demands. With the Genuine Canon 10x HD video zoom lens and a host of other advanced features the VIXIA HV30 is sure to be your choice in High Definition camcorders. And, with its HD and Standard Definition recording modes, you can make the move to HD without making your SD equipment obsolete.

**We carry Cameras, Digital Cameras, Camcorders, VCR's, DVD's, Audio, Printers, Scanners, PDA's and more**

From: Canon Nikon SAMSUNG OLYMPUS SONY FUJI Kodak PENTAX HEWLETT PACKARD JVC Panasonic SHARP palm CASIO TAMRON LOWRANCE EPSON Pioneer DANE-ELEC GARMIN TOSHIBA iRIVER bogen PINNACLE MAGELLAN zenith tomtom

All merchandise is brand new and factory fresh. Prices Are For Mail Order Only. 10% deposit required for COD orders. No restocking fee will be charged if merchandise is returned in pristine condition (returns are only subject to a 10% restocking fee if package is opened). Exchange or refund less shipping and handling within 15 days of receiving merchandise only if returned in original mint condition with original package and unfilled warranty cards. Please call 1-800-634-1811 Dial 2 for return authorization before returning product.Prices effective through end of monthly issue. Not Responsible for Typographical or Human Errors. All credit cards gladly accepted without any additional charges. New Jersey Resident add 6% Sales Tax. Prices are subject to verifiable manufacturer's price increases & decreases. Thank you for shopping with us. Fedex Saver shipping charges: minimum $8.95 under $100. Over $100 add $5.00 for every $500 increase. Caller or check website for further details. Ask for your shipping total. *Asterisk indicates price listed is after mfg's rebate. We appreciate your business every day! Prices Valid Thru Monthly Coverdate. Policy applies to all Beach Camera Advertisements. Shop on line 24 hours at our website www.beachcamera.com. Thank you for shopping with Beach!

Since 1977
TriState Camera, Video and Computers
338 8th. Ave.
(cor 27th St.)
NY, NY 10001
Store & Mail Order Hours:
Mon-Thurs 9-6 Fri 9-1:30;
Sun 10-5; Closed Sat
www.tristatecamera.com
Order Toll-Free (U.S. & Canada):
888-991-9996

## Nikon

At the heart of the image™

**Nikon Authorized Dealer**

**D700** NEW
- 12.1 megapixel FX full-frame CMOS sensor
- 5fps continuous shooting
- 3-inch VGA LCD monitor
- Live View with Autofocus
- Durable Magnesium alloy body

**D300**
- 12.3-megapixel
- 6 FPS continuous shooting
- Live View LCD w/Autofocus
- Durable, magnesium alloy body

**D90** NEW
- 12.3-megapixel DX-format
- World's first D-SLR movie mode
- Easy-to-use Live View mode
- 4.5 fps continuous shooting

**D80** New Low Price!
- 10.1 Megapixel SLR
- 0.18 sec. start-up
- In-Camera Editing
- 3D Color Matrix Metering II

D60 10.2 Megapixal.....Call

## Canon

**Authorized Dealer!**

**EOS-1D Mark III**
- 10.1 Megapixel Pro SLR
- Live View shooting mode
- Ultra Fast 10 Frames Per Second
- New! EOS Integrated Cleaning System

*New! EOS 1DS Mark III 20.1 MP.....Call*

**EOS 5D**
- 12.8 Megapixel PRO SLR
- 35mm Full Frame Equiv
- New 9-point AF system
- Magnesium alloy exterior

**EOS 50D**
- 15.1 Megapixel CMOS
- New! Fast DIGIC 4 Image Processor
- Huge, High Res 3.0" LCD
- High-Precision 9-point wide area AF

**EOS REBEL XSi** NEW
- 12.2 Megapixels DSLR
- 3" LCD w/Live View Mode
- 3.5 fps Cont. Shooting
- Secure Digital Media

**EOS REBEL XS** NEW
- 10.1 Megapixel CMOS sensor
- EOS Integrated Cleaning System
- 2.5 "LCD w/Live View shooting
- DIGIC III image processor
- Compact and lightweight body

## SONY

**Authorized Dealer!**

**Alpha 900** NEW
- Ultra-high res 24.6 MP full-frame CMOS sensor
- Ultra-bright optical viewfinder with 100% field coverage
- 5fps cont. shooting at full resolution

**Alpha 700**
- 12.1 megapixels
- Magnesium alloy body
- Dust reduction system
- 3.0 inch Hi-Resolution LCD Screen
- 11-point wide area autofocus system

**Alpha 350**
- 14.2 MegaPixel DSLR
- Tiltable 2.7 Inch LCD
- Live Preview on LCD
- Face Detection Technology
- Super SteadyShot in-camera image stabilization

**Alpha 300**
- 10.2 megapixel DSLR
- 2.7 inch LCD screen
- Super-quick AF response
- Super SteadyShot image stabilization
- Anti-dust protection for cleaner images

## OLYMPUS

**Authorized Dealer!**

**E-3 Pro** New Lower Price!
- 10.1-megapixel
- World's Fastest AF DSLR
- 2.5" swivel Live View monitor
- High eye point optical viewfinder
- Rugged magnesium-alloy construction

**EVOLT E-520** NEW
- 10.0 Megapixel
- Lightweight design
- Enhanced in-body Image Stabilization
- Face Detection & Shadow Adjustment

**EVOLT E-420**
- 10-megapixel
- World's smallest digital SLR
- Lightweight ergonomic design
- 2.7 inch Live-View LCD screen
- Dust-free technology for spot-free photos

**SP-570UZ**
- 10.0 megapixel
- 20x optical dual image stabilized zoom
- 2.7-inch LCD screen
- Hi-Speed Sequential Shooting
- Perfect Fix in-camera editing

## PENTAX

**Authorized Dealer!**

**K-20D** New Lower Price!
- 14.6 Megapixel CCD
- 2.7-inch LCD display
- Dust/Water-resistant Body
- New Live View function
- Comprehensive Dust Removal System

**K-200D** New Lower Price!
- 10-megapixel DSLR
- 2.7 inch LCD screen
- Dust Removal with Dust Alert feature
- Weather and dust resistant body

## FUJIFILM

**Authorized Dealer!**

**FinePix S5 Pro** New Lower Price!
- 12.3 MP Pro DSLR Body
- Nikon F-mount Lens compatibility
- New Super CCD SR Pro Technology
- Robust lightweight magnesium-alloy body

**FinePix S-100FS**
- 11.0 Megapixels
- 14.3X optical zoom lens,
- 2.5 Inch tiltable LCD
- Optical image stabilization
- Manual zoom & focus rings
- Looks and feels like a DSLR

# Auto Focus Lenses & Flashes For Digital SLRS

## Nikon

At the heart of the image™

AF DX 10.5/2.8G ED IF Fisheye.....579.95
*New!* PC-E 24/3.5D ED Tilt/Shift.....Call
*New!* PC-E 45/2.8D ED Tilt/Shift.....Call
*New!* AFS 60/2.8G ED Macro.....439.95
AFS DX 12-24/4.0G.....859.95
*New!* AF-S 16-85/3.5-5.6G ED DX VR.....569.95
AFS DX 17-55/2.8G ED IF.....1159.95
AFS DX 18-70/3.5-4.5G ED IF.....229.95
*New!* AFS DX 18-105/3.5-5.6 ED VR.....Call
AFS DX 18-135/3.5-5.6G ED IF.....269.95
AFS DX 18-200/3.5-5.6 ED IF VR.....619.95
AFS DX 55-200/4-5.6 G ED.....169.95
AFS DX 55-200 /4-5.6 EDIF VR.....199.95
35/2.0 D.....279.95 50/1.4 D.....Call
AF-S 105/2.8G ED IF VR Macro.....699.95
*New!* AFS 14-24/2.8 G ED.....1499.95
AFS 17-35/2.8 D ED.....1499.95
*New!* AFS 24-70/2.8 G ED.....In Stock!
AFS 70-200/2.8G ED IF VR.....Call
AF-S 70-300/4.5-5.6G EDIF VR.....449.95
80-400/4.5-5.6 D ED VR.....1299.95
TC17E II.....349.95 TC14E II.....339.95

### Flashes

R1 W/L Mac...379.95 SB-/600/800/900....Call

## PENTAX

21/3.2 ED Ltd....409.95 40/2.8 ED Ltd...259.95
70/2.4 ED Ltd....449.95 43/1.9 Ltd.....439.95
*New!* DA 35/2.8 Macro LTD.....499.95
*New!* DA 200/2.8 ED IF SDM.....979.95
*New!* 300/4.0 ED IF SDM.....1199.95
10-17/3.5-4.5 ED IF Fisheye.....399.95
*New!* DA 17-70/4.0 AL IF SDM.....499.95
18-250/3.5-6.3 ED IF ASPH MAC.....419.95
16-50/2.8 EDIF....629.00 50-135/2.8 ED IF..699.95
50-200/4-5.6 ED..179.95 55-300/F4-5.8 ED..299.95
AF360FGZ.....*189.95 AF540FGZ.....309.95

## Canon

14/2.8 LII USM..1939.95 35/1.4 L USM.....Call
50/1.2 LII USM...1279.95 50/2.5 Macro...239.95
50/1.4 .....319.95 50/1.8.....79.95
60/2.8 Macro..359.95 85/1.2 USM L II..1669.95
100/2.8 USM Macro.....449.95
*New!* EF 200mm f/2L IS USM.....Call
EF 300/4.0 L USM IS.....$1099.95
*New!* EF 800mm f/5.6L IS USM.....Call
EF-S 10-22/3.5-4.5 USM.....649.95
16-35/2.8 L II USM .....1329.95
17-40/4.0 USM.....639.95
EF-S 17-85 4-5.6 IS USM.....479.95
EF-S 17-55/2.8 IS USM.....929.95
*New!* EF-S 55-250/4-5.6 IS.....229.95
EF-S 18-55/3.5-5.6 IS.....179.95
*New!* EF-S 18-200/3.5-5.6 IS.....549.95
24-70/2.8 USM L.....1079.95
24-105 L USM IS.....1039.95
28-105/3.5-4.5 USM II.....214.95
28-135/3.5-5.6 USMIS.....399.95
28-200/3.5-5.6 USM.....329.95
28-300/3.5-5.6 IS USM L.....2149.95
70-200/4.0 L USM.....569.95
70-200/4.0 L IS USM.....979.95
70-200/2.8 L USM.....1049.95
70-200/2.8 L USM IS.....1529.95
70-300 USM IS.....499.95
70-300/4.5-5.6 DO IS.....*1069.95
75-300/4-5.6 USM.....189.95
100-400 IS USM L .....1319.95
1.4x II APO.....259.95 2x II APO.....259.95

### EOS Flashes & Acc.

580 EX II.....369.95 430 EX II.....269.95
MT 24EX .....669.95 MR 14EX.....459.95
OC-E3 Cable ...64.95 BGE-5 (R XSi)...144.95
BGE-2N New.169.95 BGE-3 (R XT)....109.95
BGE-4 ( 5D)..199.95 A. Finder C.....179.95

## OLYMPUS

E-ED 8mm.....629.95 E-ED 150/2.0.....1999.95
E-ED 7-14/4.0 Zoom.....1449.95
*New!* E-ED 9-18/4-5.6 Zoom.....519.95
E-ED 11-22/2.8-3.5 Zoom.....619.95
E-ED 12-60/2.8-4.0 SWD.....829.95
*New!* E-ED 14-35/2.0 SWD.....1949.95
14-42/3.5-5.6 ED.....179.95
40-150/4.5-5.6 ED.....169.95
E-ED 14-54/2.8-3.5 Zoom.....369.95
E-EZ 18-180/3.5-6.3.....389.95
E-ED 35-100/2.0 Zoom.....1999.95
*New!* E-ED 50-200/2.8-3.5 SWD Zoom.....979.95
E-ED 70-300/4-5.6 Zoom.....299.95
E-ED 90-250/2.8 Zoom.....Call
E-ED 35/3.5 1:1 Macro.....179.95
E-ED 50/2.0 1:2 Macro.....379.95
E-EC 14 1.4x Teleconverter.....329.95
*New!* FL-50 R.379.95 *New!* FL-36 R..179.95

## Tokina

*New!* ATX Pro DX 35/2.8 Macro.....439.95
100/2.8 ATX Pro D Macro.....329.95
10-17/3.5-4.5 ATX Pro DX Fisheye.....449.95
*New!* 11-16/2.8 ATX Pro DX.....Call
12-24/4 DX ATX Pro.....429.95
16-50/2.8 Pro DX Aspherical SD IF.....599.95
50-135/2.8 ATX Pro DX.....539.95

## TAMRON

90/2.8 1:1 LD Macro .....369.00
11-18/4.5-5.6 ...439.00 17-50/2.8 Di.....359.00
18-200 XR Di II ASPH IF Macro.....259.00
18-250/3.5-6.3 XR Di II Macro.....419.00
28-300/3.5-6.3 ASPH XR Di IF Macro.....299.00
*New!* 28-300/3.8-5.6 XR VC Di.....549.00
New! 18-270/3.5-6.3 DI II VC.....589.00
*New!* 70-200 F/2.8 DI LD IF Macro.....659.00
200-500/5-6.3 Di LD IF.....749.00

## SIGMA

*New!* 4.5/F2.8 EX DC HSM Cir FishEye...749.95
8/4.0 EX DG Cir FishEye.....599.95
*New!* 10/2.8 EX DC HSM FishEye.....559.95
15/2.8 EX DG FishEye.....499.95
30/1.4 EX DC ASPH HSM.....379.00
50/1.4 EX DG HSM.....449.95
50/2.8 EX DG Macro .....229.95
70/2.8 EX DG Macro .....379.95
105/2.8 EX DG Macro .....349.95
150/2.8 EX DG APO Macro.....549.95
10-20/4-5.6 EX DC .....419.95
12-24/4.5-5.6 EX ASP HSM.....629.95
17-70 2.8-4.5 Asph DC.....319.99
18-50mm F2.8 EX DC Macro.....359.95
*New!* 18-50/3.5-5.6 DC HSM.....119.95
*New!* 18-125mm F3.5-5.6 DC OS.....299.95
18-200mm F3.5-6.3 DC Asph.....289.95
*New!* 50-150/2.8 EX DCHSM II.....639.95
*New!* DC18-200mm F3.5-6.3 OS.....369.95
55-200mm F4-5.6 DC HSM.....139.95
24-70/2.8 EX MAC DF ASPH.....399.95
28-300/3.5-6.3 DG ASPH IF.....239.95
50-500/4-6.3 EX DG APO HSM.....929.95
*New!* 70-200/2.8 EX DG Mac HSM II...689.95
70-300/4-5.6 APO DG Macro .....189.95
100-300/4.0 EX DG IF APO HSM.....949.00
120-300/2.8 EX APO HSM.....2399.95
APO 120-400/4.5-5.6 DG OS HSM.....729.95
APO 150-500/5-6.3 DG OS HSM.....839.95
300-800/5.6 EX DG APO IF HSM.....6299.00
1.4X EX APO...169.95 2X EX APO.....189.95

### Dedicated Flashes

*New!* EF 530DG Super.....219.95
*New!* EF 530DG ST.....169.95
EM-140 Macro Ringlite.....319.95

Please send certified check or money order for immediate shipment. Allow 20 days for bank clearance on personal checks. Add shipping, handling & insurance charges (non refundable) Merchandise exchanged within 15 days if found defective. Returns must have prior authorization & include invoice copy, original packing & blank warranty card. For your protection, all credit card orders are thoroughly verified. Prices subject to suppliers pricing. U.S. Warranty may be additional. N.Y.S residents add sales tax. Not responsible for typographical errors. Artwork is for illustration purposes only.

# Why Waste Time Searching for Accessories?

$949.99 CNXSIBGDC1

$1014.99 CNXTIBGDC2

$1,349.00 CN40DBGDC2

$1,449.99 CN30DDC2

$1,999.99 CN50DBGDC2

$4,099.99 CN5DM2INDC3

$1,020.00 OLE510DC1

$1,049.00 NKD60BGDC2

$1,299.99 NKD80DC3

$1529.99 NKD90BGDC2

$2,100.00 NKD300INDC1

$4,550.00 NKD3PRDC1

**FREE** shipping upgrade
with a Package Purchase!
*min: $750*
PROMO: Pop

See Our Complete
Combo Collection at
www.DigiCombos.com/p

Sunday: 10:00 am to 7:00 pm EST
Monday - Thursday: 9:00 am to 9:00 pm EST
Friday: 9:00 am to 2:30 pm EST

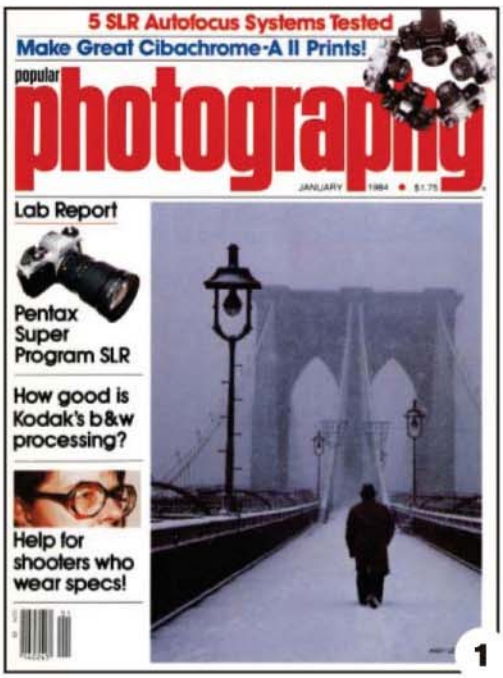
PayPal VISA Google

digicombos.com
One Place • One Package • One Price

**Call Our Expert Combo Creators:** 866-640-7889

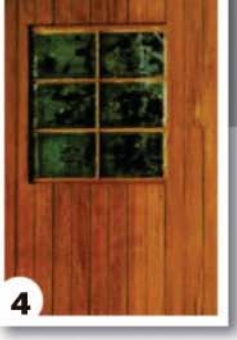
54 Pearl Street • Brooklyn, NY 11201

# 25 YEARS AGO
## JANUARY 1984


5 SLR Autofocus Systems Tested
Make Great Cibachrome-A II Prints!
popular photography
JANUARY 1984 • $1.75
Lab Report
Pentax Super Program SLR
How good is Kodak's b&w processing?
Help for shooters who wear specs!
1

2

3


4

**1. Icon in winter:** A solitary walker on the snow-draped Brooklyn Bridge was recorded by Andy Levin using a tripod-mounted 35mm SLR and 35mm wide-angle lens. The exposure on Kodachrome 64 film was not recorded. Levin had gone out to make pictures of the bridge after an early-winter snowstorm.

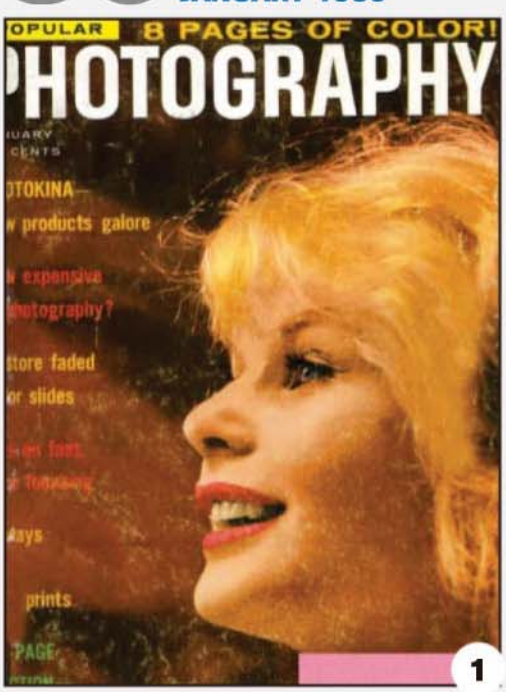
**2. Hot quintet:** To cope with a burst of new electronic-autofocus reflexes, Technical Director Norman Goldberg combined analysis of five models in one report. Although the new AF systems went a long way to easing focusing problems, Goldberg concluded that they were not yet foolproof. He advised photographers to be aware of the systems' limitations, and to then "become the final testing ground as you handle the camera, shoot a few rolls with it," and study the results.

**3. Chinese TLR:** As part of a follow-up report on photography in China, Editorial Director Arthur Goldsmith photographed this amateur using a Chinese-made twin-lens reflex. While no camera name was supplied, we're willing to bet it was an early-model Seagull, whose TLRs today are popularly sold in the U.S. as a reasonably priced entry into medium-format photography.

**4. Homely abstract:** The technique used by Dorothea Kehaya for making Cibachrome prints from color slide film was detailed in a feature written by David Vestal, a well-known photographer and teacher. She used glossy, polyester-based Cibachrome A-II, which she found sharper and more brilliant than traditional photo paper. Her patience, practice, and precision paid off in dramatic color prints from 35mm Kodachrome slides.

1930 | 1940 | 1950 | 1960 | 1970 | 1980 | 1990

# 50 YEARS AGO
## JANUARY 1959



1

2

**1. Nordic miss:** Model and actress Ingrid Goude, Miss Sweden 1956, was captured by photographer Don Ornitz. Assigned to take "glamour" pictures for a men's magazine, Ornitz was so intrigued by her face that he made only headshots. This photo was taken on Kodachrome using a Pentax SLR with a 135mm f/4.5 Schneider Xenar lens plus a skylight filter. Exposure was 1/10 sec at f/5.

**2. Whiteout:** This striking, high-contrast picture was made by Tom Nebbia of Arlington, VA. He shot it in a rainstorm using a 4x5 Speed Graphic with a 5-inch Optar f/4.5 lens. The exposure on Royal Pan film was 1/100 sec at f/5.6. Nebbia purposely underexposed and overdeveloped his negative to increase the photo's contrast.

3

**3. Matchbox Mamiya:** Cameras the size of cigarette packages gave way to ones the size of matchboxes, as with this Mamiya 16. It included an "Action Wheel" to advance film and set shutter speed, built-in flash-sync, close-focusing to 12 inches, and a built-in yellow filter. All this for $39.95—or, for big spenders, a gift kit with case, flash and flash bulbs, plus three rolls of black-and-white film, for $49.50.

**4. Photo Edsel?** In an inexplicable marketing move, Bell & Howell introduced its "Infallible" box camera with electric-eye exposure automation. The camera used 127 film to produce 12 4x4cm (Super Slide) images. Designed to provide the convenience of a box camera, it was as expensive ($79.95 with flash and case) as lens/shutter 35mm models that provided more versatility. The Infallible sank without a ripple.

4

# 800-947-9980
## 212-444-6666
*Fax: 212-239-7770*

## 420 Ninth Ave.
*Corner of 34th Street*
## New York, N.Y. 10001

**Store & Mail Order Hours: Sunday 10-5 • Mon.-Thurs. 9-7 • Friday 9-1 • Saturday Closed**

B&H PHOTO - VIDEO - PRO AUDIO

**The Professional's Source**

## B&H Online

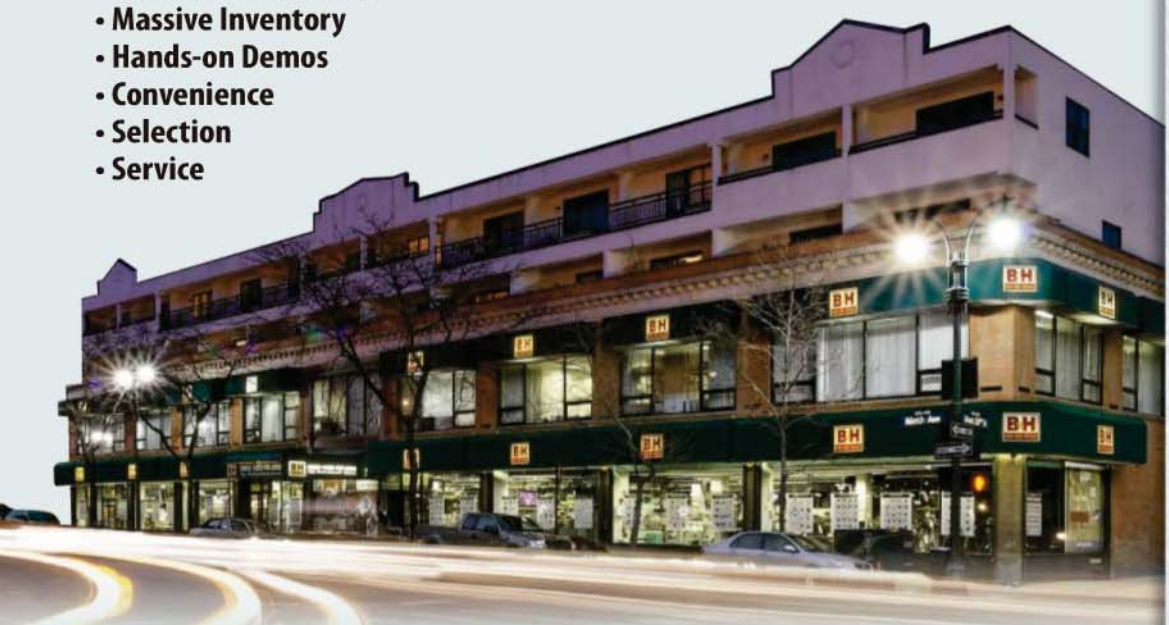
- **Support, before and after sale**
- **Online live support**
- **Massive online presence**
- **Educate yourself in our product resource center**

**www.bhphotovideo.com**

***Your source for brand name gear at discount prices***

## B&H SuperStore

- **70,000 Sq Ft. Superstore**
- **Worldwide Shipping**
- **Massive Inventory**
- **Hands-on Demos**
- **Convenience**
- **Selection**
- **Service**



## Used Dept.

**Buying & Selling your used gear just got easier**

With online quotes you can log on to **bhphotovideo.com/used** and experience B&H at your convenience.

## Quick Dial

Instantly reach a professional sales associate in our Order Department to assist you with your specific needs. This feature will speed you through the information and ordering process, making your communications with B&H a more pleasurable experience. Just find the Quick Dial icon in our ads, then call B&H and dial the corresponding department code at any time during our welcome message, to be connected immediately to the department you need.

Specifications are those that have been supplied to us by the manufacturers and are subject to change without notice. Photos are for illustration purposes only and are subject to change without notice. Manufacturers rebates, terms, conditions and expiration dates are subject to manufacturer printed forms. **Prices are valid thru January 9, 2009** subject to supplier pricing. Not responsible for typographical errors. **© 2009 B & H Foto & Electronics Corp.**

B&H PHOTO - VIDEO - PRO AUDIO

The Professional's Source

## B&H Phones

**800-947-9980**

**212-444-6666**

*Fax:*

**212-239-7770**

*To Inquire About Your Order Call:*

**800-221-5743**

**212-239-7765**

*or Fax:*

**866-521-7375**

**212-502-9426**

## B&H Store

**420 Ninth Ave.**

*Corner of 34th Street*

**New York, N.Y. 10001**

*Store & Mail Order Hours:*

**Sunday 10-5**
**Mon.-Thurs. 9-7**
**Friday 9-1**
**Saturday Closed**

Most orders shipped within 24 hours

Overnight service available

All items are complete with all accessories as supplied by manufacturer.

Used equipment bought, sold and traded

Equipment leasing available



Quick Dial 61

8 MegaPixels

**Canon Powershot A590 IS**
***Optical Image Stabilizer System***
- 8 Megapixels • 2.5" LCD Monitor
- Face Detection & Motion Detection
- 4x Optical Zoom • 4x Digital Zoom
- 5.8-23.2mm f/2.6-5.5 (35 equiv. 35-140mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions: 2.6 x 3.7 x 1.6"
- Weight 6.2 oz

#CAPSA590IS*

10 MegaPixels

**Canon Powershot A1000 IS**
***Optical Image Stabilizer System***
- 10 MegaPixels • 2.5" LCD Monitor
- 4x Optical Zoom • 4x Digital Zoom
- 6.2-24.8mm f/2.7-5.6 (35 equiv. 35-140mm)
- SD/SDHC (High Capacity) Card Slot
- Dim. 3.75 x 2.5 x 1.2" • Weight 5.47 oz

***Blue, Brown, Grey or Purple***

#CAPSA1000*

10 MegaPixels

**Canon Powershot A2000 IS**
***Optical Image Stabilizer System***
- 10 MegaPixels • 3" LCD Monitor
- Advanced Red-eye Correction
- 6x Optical Zoom • 4x Digital Zoom
- 6.4-38.4mm f/3.2-5.9 (35 equiv. 36-216mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions 4 x 2.5 x 1.25"
- Weight 6.5 oz

#CAPSA2000*

10 MegaPixels

**Canon Powershot E1**
***Optical Image Stabilizer System***
- 10 MegaPixels • 2.5" LCD Monitor
- 4x Optical Zoom • 4x Digital Zoom
- 6.2-24.8mm f/2.7-5.6 (35 equiv. 35-140mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions 4 x 2.5 x 1.25"
- Weight 5.64 oz

***Blue, Pink or White***

#CAPSE1*

10 MegaPixels

**Canon Powershot SD890 IS**
***• Optical Image Stabilizer • Advanced red-eye correction • Motion Detection***
- 10 MegaPixels • 2.5" LCD Monitor
- 5x Optical Zoom • 4x Digital Zoom
- 6.6-33mm f/3.2-5.7 (35 equiv. 37-185mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions 2.3 x 3.8 x 1.1"
- Weight 4.6 oz

#CAPSSD890*

10 MegaPixels

**Canon Powershot SD770 IS**
***Optical Image Stabilizer System***
- 10 MegaPixels • 2.5" LCD Monitor
- Advanced Red-eye Correction
- 3x Optical Zoom • 4x Digital Zoom
- 6.2-18.6mm f/2.8-4.9 (35 equiv. 35-105mm)
- SD/SDHC (High Capacity) Card Slot
- Dim. 2.2 x 3.4 x 0.8" • Weight 4.6 oz

***Black or Silver***

#CAPSSD770*

10 MegaPixels

**Canon Powershot SD790 IS**
***Optical Image Stabilizer System***
- 10 MegaPixels • 3" LCD Monitor
- Advanced Red-eye Correction
- 3x Optical Zoom • 4x Digital Zoom
- 6.2-18.6mm f/2.8-4.9 (35 equiv. 35-105mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions 2.3 x 3.6 x 0.8"
- Weight 5.4 oz

#CAPSSD790*

8 MegaPixels

**Canon Powershot SD1100 IS**
- 8.0 MegaPixels • 2.5" LCD Monitor
- 3x Optical Zoom • 4x Digital Zoom
- 6.2-18.6mm f/2.8-4.9 (35mm equiv. 38-114mm) Lens • Image Stabilizer
- SD/SDHC (High Capacity) Card Slot
- Dim. 2.2 x 3.4 x 0.9" • Weight 4.4 oz

***Blue, Brown, Gold, Pink, or Silver***

#CAPSSD1100*

14 MegaPixels

**Canon Powershot G10**
***Optical Image Stabilizer System***
- 14.7 MegaPixels • 3" LCD Monitor
- RAW File Mode • E-TTL Flash Hot Shoe
- 5x Optical Zoom • 4x Digital Zoom
- 6.1-30.5mm f/3.2-5.9 (35 equiv. 28-140mm)
- SD/SDHC (High Capacity) Card Slot
- Dimensions 3.1 x 4.3 x 1.8"
- Weight 12.3 oz

#CAPSG10*

6 MegaPixels

**CASIO Exilim Pro EX-F1**
***• Incredible 60 fps Burst • Full Resolution HD Movie Record • CMOS Shift Anti-shake***
- 6.0 MegaPixels • 2.8" Wide format LCD
- 12x Optical Zoom • 4x Digital Zoom
- 7.3-87.6mm f/2.7-4.6 (35mm Equiv. 36-432mm)
- SD/SDHC Card Slot • 32MB Built-in Memory
- RAW File Mode • Dim. 5.03 x 3.1 x 5.12"
- Weight 23.67 oz

#CAEXF1*

8 MegaPixels

**FUJIFILM FinePix J10**
***• Picture stabilization mode***
- 8.0 MegaPixels • 2.5" LCD Monitor
- 3x Optical Zoom • x Digital Zoom
- 6.2-18.6mm f/2.8-5.2 (35 Equiv. 35-113mm)
- xD & SD/SDHC card slots • 8MB built-in memory • On-Screen Shooting Guide
- Dim. 3.8 x 2.2 x 0.9" • Weight 3.9 oz

***Black or Silver***

#FUFPJ10*

10 MegaPixels

**FUJIFILM FinePix Z20fd**
***• Blog Mode • One-touch Movie Recording***
- 10 MegaPixels • 2.5" LCD Monitor
- 3x Non-extending Optical Zoom Lens
- 5.7x Digital Zoom • xD & SD/SDHC Card Slot
- 6.3-18.9mm f/3.7-4.2 (35 Equiv. 35-105mm)
- Dimensions 2.2 x 3.6 x 0.8"
- Weight 3.9 oz

#FUFPZ20FD*

12 MegaPixels

**FUJIFILM FinePix F60fd**
***Dual Image Stabilization***
- 12 MegaPixels • 3" LCD Monitor
- 3x Optical Zoom • 8.2x Digital Zoom
- 8-24mm f/2.8-5.1 (35 Equiv. 35-105mm) Lens
- xD & SD Card Slots • 25MB Built-in Memory • Micro Thumbnail View
- Dimensions 3.6 x 2.3 x 0.9"
- Weight 5.7 oz

#FUFPF60FD*

10 MegaPixels

**FUJIFILM FinePix S2000HD**
***• HD Video Record & Playback***
- 10 MegaPixels • 2.7" LCD Monitor
- 15x Optical Zoom • 5.7x Digital Zoom
- 2-75mm f/3.5-5.4 (35 Equiv. 27.6-414mm)
- SD/SDHC (High Capacity) Card Slot
- 55MB Built-in Memory • Dual IS
- Dimensions 3.1 x 4.4 x 3"
- Weight 13 oz

#FUFPS2000HD*

8 MegaPixels

**Kodak EasyShare M863**
***• Optical Image Stabilization***
- 8.2 MegaPixels • 2.7" LCD Monitor
- 3x Optical Zoom • 5x Digital Zoom
- f/2.8 (35 Equiv. 34-102mm) • SD/SDHC Card Slot • 16 MB Built-in Memory
- Dim. 4.3 x 2.9 x 3" • Weight 11.6 oz

***Black, Blue, Copper, Pink, Red, or Silver***

#KOM863*

10 MegaPixels

**Leica D-Lux 4**
- 10.1 Megapixel • 3" LCD Monitor
- 2.5x Optical • 4x Digital Zoom
- 5.1-12.8mm f/2-2.8 (35 equiv. 24-60mm) DC Vario-Summicron lens • ISO 80-3200
- SD/SDHC Card Slot • 50MB Internal memory • RAW+JPEG File Mode
- Dimensions 2.3 x 4.3 x 1"
- Weight 8 oz

#LEDL4*

9 MegaPixels

**Nikon Coolpix S60**
***• Optical VR Image Stabilization***
- 9.0 MegaPixels • 3" LCD Monitor
- 3x Optical Zoom • 4x Digital Zoom
- 6.3-18.9mm f/3.3-4.2 (35 Equiv. 38-114mm)
- SD/SDHC Card Slot • 38MB Built-in Memory
- Dim. 3.6 x 2.3 x 0." • Weight 4.4 oz

**Black, Bronze, Burgandy, Pink, Red or White**

#NICPS60*

10 MegaPixels

**Nikon Coolpix P80**
***• Optical VR Image Stabilization***
- 10.1 MegaPixels • 2.7" LCD Monitor
- 18x Optical Zoom • 4x Digital Zoom
- 4.7-84.2mm f/2.8-4.5 (35 Equiv. 27-486mm) • SD/SDHC Card Slot
- 50MB MB Built-in Memory • D-Lighting
- Dimensions 3.1 x 4.3 x 3.1"
- Weight 12.9 oz

#NICPP80*

13 MegaPixels

**Nikon Coolpix P6000**
***• VR Image Stabilization***
- 13.5 MegaPixels • 2.7" LCD Monitor
- 4x Optical Zoom • 4x Digital Zoom
- 6-24mm f/2.7-5.9 (35 Equiv. 28-115mm)
- SD/SDHC Card Slot • 48MB MB Built-in Memory • Coolpix RAW Format
- Dimensions 2.6 x 4.2 x 1.7"
- Weight 8.5 oz

#NICPP6000*

8 MegaPixels

**OLYMPUS FE-360**
***• Digital Image Stabilization***
***• 20 Shooting Modes*** • 8.0 MegaPixels
- 2.5" LCD Display with Backlight Boost
- 3x Optical Zoom • 4x Digital Zoom
- 6.3-18.9mm f/3.1-5.9 (35 Equiv. 36-108mm)
- xD card slot • 20.5MB internal memory
- Dim. 3.7 x 2.2 x 0.7" • Weight 3.5 oz

***Black, Blue, Pink, Red or Silver*** #OLFE360*

**OLYMPUS Stylus 1010 SW**
*Dual Image Stabilization*
• 10.1 MegaPixels • 2.7" LCD Monitor
• 7x Optical Zoom • 5x Digital Zoom
• 6.6-46.2mm f/3.5-5.3 (35 Equiv. 37-260mm)
• xD Card Slot • 14.7MB Built-in memory
• Dim. 2.2 x 3.9 x 1" • Weight 4.8 oz
*Black, Blue, Purple or Silver* #OLS1010*

**OLYMPUS SP-570 UZ**
• 10 Megapixels • RAW File Mode
• 2.7" LCD Monitor • Electronic Viewfinder
• 20x Optical Zoom • 5x Digital Zoom
• 4.6-92mm f/2.8-4.5 (35 equiv. 26-520mm)
• xD card slot • 45MB Internal Memory
• Manual Exposure • 13.5 fps Burst
• Dimensions 3.3 x 4.7 x 3.4"
• Weight 15.7 oz #OLSP570UZ*

**Panasonic Lumix DMC-TZ5**
*MEGA O.I.S. (Optical Image Stabilizer)*
• 9.0 Megapixels • 3.0" Intelligent LCD
• 10x Optical Zoom • 4x Digital Zoom
• 4.6-46mm f/3.3-4.9 (35 equiv. 28-280mm) Leica DC Vario-Elmarit lens • HD Video Capture
• SD/SDHC Card Slot • 27MB built-in Memory
• Dim. 2.4 x 4.1 x 1.5" • Weight 7.4 oz
*Black, Blue or Silver* #PADMCTZ5*

**Panasonic Lumix DMC-FX500**
*MEGA O.I.S. (Optical Image Stabilizer)*
• 10.1 Megapixels • 3" Touch-screen LCD
• 5x Optical Zoom • 4x Digital Zoom
• 4.4-22mm f/2.8-5.9 (35 equiv. 25-125mm) Leica DC Vario-Elmarit lens • SD/SDHC Card Slot • 50 MB built-in Memory
• Dim. 3.8 x 2.3 x 0.9" • Weight 5.5 oz
*Black or Silver* #PADMCFX500*

**Panasonic Lumix DMC-LX3**
*MEGA O.I.S. (Optical Image Stabilizer)*
• 10.1 MegaPixels • 3.0" LCD Monitor
• 2.5x Optical Zoom • 4x Digital Zoom
• 5.1-12.8mm f/2-2.8 (35 Equiv 24-60mm) Leica Lens • RAW File Mode
• SD Card Slot • 50MB Built-in Memory
• Dim. 2.4 x 4.3 x 1.1" • Weight 8 oz
*Black or Silver* #PADMCLX3*

**PENTAX Optio W60**
• *JIS Class 8 Waterproof to 13'*
• *Face Recognition* • *HD Movie Capture*
• 10 MegaPixels • 2.5" LCD Monitor
• 5x Optical Zoom • 5.7x Digital Zoom
• 5-25mm f/3.3-4 (35 Equiv. 28-140mm)
• SD/SDHC (High Capacity) Card Slot
• Dimensions 2.2 x 3.9 x 1" • Weight 4.4 oz
*Ocean Blue, or Silver* #PEOW60*

**SAMSUNG L100**
• 8.2 MegaPixels • 2.5" LCD Monitor
• 3x Optical Zoom • 3x Digital Zoom
• 6.2-18.6mm f/2.8-5.2 (35 Equiv. 37-111mm)
• SD/SDHC (High Capacity) Card Slot
• 10MB Built-in Memory • Voice Recording
• Record 640 x 480 video at 30 fps
• Dim. 2.2 x 3.5 x 0.8" • Weight 4.1 oz
*Black or Silver* #SAL100*

**SAMSUNG S860**
• *Face Detection & Self Portrait Modes*
• 8.1 MegaPixels • 2.4" LCD Monitor
• 3x Optical Zoom • 3x Digital Zoom
• -mm f/ (35 Equiv. 37-111mm)
• SD/SDHC Card Slot • 11MB Built-in Memory
• Record 640 x 480 video at 30 fps
• Dim. 2.2 x 3.5 x 0.8" • Weight 4.1 oz
*Black or Silver* #SAS860*

**SONY CyberShot DSC-S780**
• 7.2 MegaPixels • 2.5" LCD Monitor
• 3x Optical Zoom • 2x Digital Zoom
• 5.8-17.4mm f/2.8-4.8 (35 Equiv. 35-105mm) • Simple Controls
• Function Guide • MS Duo/Pro Duo Card Slot • 22MB Built-in Memory
• Dimensions 2.4 x 3.6 x 1.1"
• Weight 5.3 oz #SODSCS780*

**SONY CyberShot DSC-W120**
• 7.2 MegaPixels • 2.5" LCD Monitor
• 4x Optical Zoom • 6x Digital Zoom
• 5.35-21.4mm f/2.8-5.8 (35 Equiv. 32-128mm) Carl Zeiss Vario-Tessar Lens • MS Duo/Pro Duo Card Slot • 15MB Built-in Memory • Double Anti-Blur System • D-Range Optimizer
• Dim. 2.3 x 3.5 x 0.9" • Weight 4.3 oz
*Black, Blue, Pink or Silver* #SODSCW120*



**SONY CyberShot DSC-W150**
• *Double Anti-Blur System*
• 8.1 MegaPixels • 2.7" LCD Monitor
• 5x Optical Zoom • 2x Digital Zoom
• 5-25mm f/3.3-5.2 (35 Equiv. 30-150mm) Carl Zeiss Vario-Tessar Lens • MS Duo/Pro Duo Card Slot • 15 MB Built-in Memory
• Dim. 2.3 x 3.7 x 0.9" • Weight 6.1 oz
*Black, Gold, Red, or Silver* #SODSCW150*



**SONY CyberShot DSC-W170**
• *Capture 640 x 480 video at 30 fps*
• 10.1 MegaPixels • 2.7" LCD Monitor
• 5x Optical Zoom • 2x Digital Zoom
• 5-25mm f/3.3-5.2 (35 Equiv. 28-140mm) Carl Zeiss Vario-Tessar Lens • MS Duo/Pro Duo Card Slot • 15 MB Built-in Memory
• Dim. 2.3 x 3.7 x 0.9" • Weight 5.5 oz
*Black, Gold, Red, or Silver* #SODSCW170*



**SONY CyberShot DSC-T300**
• *Super Steady Shot Stabilization*
• 10.1 MegaPixels • 3.5" LCD Monitor
• Touch-Screen Operation
• 5x Optical Zoom • 2x Digital Zoom
• 5.8-29mm f/3.5-4.4 (35 Equiv. 33-165mm) Carl Zeiss Lens • MS Duo/Pro Duo Card Slot
• Dim. 2.3 x 3.7 x 0.8" • Weight 5.3 oz
*Black, Red or Silver* #SODSCT300*



**SONY CyberShot DSC-H50**
• *NightShot Infrared System*
• 9.1 MegaPixels • 3" Tilt-up LCD Monitor
• 15x Optical Zoom • 2x Digital Zoom
• 5.2-78mm f/2.7-4.5 (35 Equiv. 31-465mm) Carl Zeiss Lens • HDTV Compatibility
• MS Duo Card Slot • 15MB Built-in Memory
• Dimensions 3.2 x 4.6 x 3.4"
• Weight 14.6 oz #SODSCH50*

## Memory Cards

### CF Compact Flash

| | Delkin | | Kingston | | | Lexar | | | Sandisk | | | Sony | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Std | Pro | Std | Ultimate 133x | Ultimate 266x | Platinum II | 133x | 300x | Ultra II | Extreme III | Extreme IV | 133x | 300x |
| 1GB | 9.95 | 25.95 | 9.95 | — | — | — | — | — | — | — | — | — | — |
| 2GB | 12.50 | 38.50 | 13.95 | — | 29.95 | 16.95 | 34.95 | 38.95 | 15.95 | 24.50 | — | 44.95 | — |
| 4GB | 19.95 | 64.95 | 18.95 | 19.50 | 56.95 | 29.95 | 49.95 | 77.95 | 32.50 | 39.95 | 73.50 | 74.95 | 104.95 |
| 8GB | — | 124.95 | — | 28.95 | 106.95 | 46.95 | 93.50 | 147.95 | 48.95 | 64.95 | 138.50 | — | 199.95 |
| 16GB | — | 226.50 | — | 64.95 | — | — | — | — | — | 149.95 | — | — | — |

### MSDUO Memory Stick Pro Duo

| | Lexar | | Sandisk | | | | Sony | |
|---|---|---|---|---|---|---|---|---|
| | 40x | Gaming | Standard | Ultra II | Ultra II Mobile | Gaming | Standard | Mark II |
| 1GB | 13.50 | 13.50 | 13.50 | — | — | 21.95 | 19.50 | 19.95 |
| 2GB | 19.50 | — | 19.95 | 24.50 | — | — | — | 29.95 |
| 2GB 2 Pack | — | — | 32.50 | — | — | — | — | — |
| 4GB | 27.50 | — | 32.50 | 36.50 | 129.95 | 32.50 | — | 45.95 |
| 8GB | 49.95 | — | 56.95 | 62.50 | — | — | — | 99.95 |
| 16GB | — | — | — | — | — | — | — | 154.95 |

### SD Secure Digital

| | Delkin | | | | Kingston | Lexar | | | Sandisk | | | | | Panasonic | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Standard | Pro | Micro | Mini | Standard | Standard | Platinum II 60x | 133x | Standard | Ultra II | Extreme III | Micro | Micro Ultra | 5MBs Class 2 | 5MBs Class 4 | 20MBs Class 6 |
| 1GB | 7.50 | 12.50 | 6.50 | — | — | 8.95 | 11.95 | — | — | — | — | 13.95 | 29.95 | 8.95 | — | — |
| 2GB | 9.95 | 12.95 | 9.95 | 16.95 | 7.50 | 13.50 | 17.95 | 27.50 | 12.99 | 16.50 | 29.95 | 18.95 | — | — | 9.50 | 14.50 |
| 4GB | — | — | — | 22.95 | — | — | — | — | — | — | — | — | — | — | — | — |
| 8GB | — | — | — | 47.95 | — | — | — | — | — | — | — | — | — | — | — | — |

### XD xD Memory

| Type M | 1GB | 2GB |
|---|---|---|
| Fuji | 24.95 | 39.95 |
| Olympus | M+ 22.95 | M+ 26.95 |
| Sandisk | 18.95 | 24.95 |

### SD HC Secure Digital High Capacity

| | Delkin | | Kingston | | Lexar | | | Panasonic | | | Sandisk | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Pro Class 6 | Standard Class 2 | Standard Class 4 | Class 6 | Standard Class 2 | Platinum II 60x Class 6 | 133x Class 6 | 6 MBs Class 6 | 10 MBs Class 4 | 20 MBs Class 6 | Standard Class 2 | Ultra II Class 4 | Ultra II Class 6 | Extreme III 20MBs Class 6 | Micro Class 2 |
| 4 GB | 15.95 | 14.95 | 14.50 | 13.95 | 19.95 | 23.50 | 46.95 | — | 14.50 | 24.50 | 19.95 | — | 24.50 * | 39.95 | 26.95 |
| 8GB | 29.95 | 26.95 | 24.95 | 25.95 | — | — | 84.95 | 54.50 | — | — | 36.50 | 39.95 * | — | 64.95 * | — |
| 16 GB | 66.95 | — | 64.95 | — | — | — | — | — | — | 101.95 | — | 73.50 * | * with Reader | | — |
| 32 GB | 167.95 | — | — | — | — | — | — | — | — | 298.95 | — | 146.95 * | — | — | — |


B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source

B&H Online
bhphotovideo.com

- Support, before and after sale
- Online live support
- Massive online presence
- Huge inventory available for worldwide shipping
- Educate yourself in our product resource center

One hour free parking at 349 west 34th st.

For a free catalog, call 800-947-6933, 212-444-6633, write or go online.

Seven day customer satisfaction guarantee!

Corporate accounts welcome

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source

B&H Phones
800-947-9980
212-444-6666
Fax:
212-239-7770
To Inquire About Your Order Call:
800-221-5743
212-239-7765
or Fax:
866-521-7375
212-502-9426

B&H Store
420 Ninth Ave.
Corner of 34th Street
New York, N.Y.
10001

Store & Mail Order Hours:
Sunday 10-5
Mon.-Thurs. 9-7
Friday 9-1
Saturday Closed

Most orders shipped within 24 hours

Overnight service available

All items are complete with all accessories as supplied by manufacturer.

Used equipment bought, sold and traded

Equipment leasing available



Quick Dial 64

12 MegaPixels

Digital Rebel XSiT (Black or Silver)
Body Only ..... #CAEDRXSI*
Kit with 18-55mm IS ..... #CAEDRXSIKB*

## Canon Digital Rebel XSi
**"D-SLR" Digital SLR Camera**
- 12.2 MegaPixels CMOS Sensor
- 3.0" LCD Monitor • SLR viewfinder
- Live View Function • USB 2.0
- Uses Canon EF Lenses (1.6x factor)
- SD/SDHC (High Capacity) Card Slot
- Auto or Manual Focus
- 3.5 fps Continuous Shooting
- High Sensitivity (ISO 100-1600)
- Picture Style Settings
- Integrated Cleaning System
- Uses LP-E5 Battery
- Dimensions 3.8 x 5.1 x 2.4"
- Weight 16.8 oz Body Only

12 MegaPixels

EOS-5D Body Only ..... #CAE5D
Kit with 24-105mm "L" IS USM ..... #CAE30D24105

## Canon EOS-5D
**"D-SLR" Digital SLR Camera**
- ***Full-Frame 36x24mm DIGIC II CMOS sensor*** • 12.8 MegaPixels
- 2.5" LCD Monitor • SLR viewfinder
- Uses Canon EF Lenses • USB 2.0
- CF, MD Card Slot with Playback file size display • Auto or Manual Focus
- 3 fps Burst rate • Hot Shoe & Flash Sync. • Program, Aperture, Shutter, Depth-of-Field, Bracketing, Manual
- ISO 100-3200 • Uses BP-511A Battery
- Dimensions 6 x 4.4 x 2.9"
- Weight 28.5 oz. body only

10 MegaPixels

EOS-40D Body Only ..... #CAE40D
Kit with 28-135mm IS USM ..... #CAE40D28135

## Canon EOS-40D
**"D-SLR" Digital SLR Camera**
- ***RAW and sRAW Image Capture***
- 10.2 MegaPixels • SLR viewfinder
- 3" LCD Monitor with Live View
- Uses Canon EF Lenses (1.6x factor)
- CF Card Slot • "Picture Style" Settings
- Versatile Exposure Metering System
- Single, Continuous, or Manual Focus
- EOS Integrated Cleaning System
- ISO 100-3200 • Burst rate: 6.5 fps
- USB 2.0 • Uses BP-511A Battery
- Dimensions 5.7 x 4.2 x 2.9"
- Weight 26.1 oz Body Only

10 MegaPixels

EOS-1D Mark III Body Only ..... #CAE1D3

## Canon EOS-1D Mark III
**"D-SLR" Digital SLR Camera**
- 10.1 MegaPixels
- DIGIC III Image Processor
- 3" LCD Monitor with live view mode
- Uses Canon EF Lenses (1.3x factor)
- SD & CF Card Slots • 10 fps Shootng Speed • 300,000 Cycle Shutter Unit
- 110 JPEG/30 RAW Image Burst Rate
- 100% Viewfinder Frame Coverage
- 1/300 SEC. Sync Speed
- ISO 50-6400 • Uses LP-E4 Battery
- Dimensions 6.2 x 6.1 x 3.1"
- Weight 40.7 oz. Body Only

15 MegaPixels

EOS-50D Body Only ..... #CAE50D
Kit with 28-135mm IS USM ..... #CAE50D28135

## Canon EOS-50D
**"D-SLR" Digital SLR Camera**
- ***RAW and sRAW Image Capture***
- 15.1 MegaPixels • SLR viewfinder
- 3.0" Clear View VGA LCD
- Uses Canon EF Lenses (1.6x factor)
- CF Card Slot • "Picture Style" Settings
- HDMI output that enables the display of your photographs on any HDTV with HDMI ports • Live View Function
- Single, Continuous, or Manual Focus
- Incredibly High ISO Sensitivity
- Versatile Exposure Metering System
- USB 2.0 • Uses BP-511A Battery
- Dimensions 4.2 x 5.7 x 2.9"
- Weight 25.7 oz Body Only

21 MegaPixels

EOS-1Ds Mark III Body Only ..... #CAE1DS3

## Canon EOS-1Ds Mark III
**"D-SLR" Digital SLR Camera**
- ***Full-Frame CMOS Sensor***
- ***Weather Resistant Body***
- ***Self-Cleaning Sensor***
- 21.1 MegaPixels • SLR viewfinder
- 3" LCD Monitor with Live View
- Uses Canon EF Lenses • 5 fps Burst
- SD/SDHC & CF card slots • USB 2.0
- UDMA-compliant CompactFlash
- Fast AF system • Picture Style Settings
- Powerful Bundled Software
- ISO 100-1600 • Uses LP-E4 Battery
- Dimensions 6.3 x 6.1 3.1"
- Weight 42.5 oz. Body Only

Quick Dial 64

# SLR Lenses & Flashes

## Canon 580 EX II Shoe Mount Flash

Instant Rebate $50 Rebate

- Guide No. 190'
- Dust- and water-resistance
- Metal Hot Shoe
- Superior build quality, including a metal foot for higher rigidity
- E-TTL II, E-TTL, TTL & Manual
- Bounce & Swivel Head
- Zoom Head (24-105mm)
- Weight 13.2 oz

## Canon 10-22/3.5-4.5 EF-S USM Digital Lens

Instant Rebate $50 Rebate

- ***Exclusively designed for Digital SLRs***
- 35mm equivalent 16-35mm
- 3 aspherical lens elements
- 3.5-27 f/Stop Range
- Focus 9.5" to Infinity
- 72mm filter diameter
- Weight 13.6 oz

## Canon 17-55/2.8 EF-S USM Digital Lens

Instant Rebate $70 Rebate

- ***Exclusively designed for Digital SLRs***
- IS (Image Stabilizing) technology
- 2.8-22 f/Stop Range
- Focus 13.8" to Infinity
- Angle of View 78.3°-27.5°
- 77mm filter diameter
- Weight 22.4 oz

## Canon 24-70/2.8 EF "L" USM Lens

Instant Rebate $80 Rebate

- sealed and gasketed against dust & moisture
- Internal Focusing
- UD Element
- Two Aspherical Elements
- 2.8-22 f/Stop Range
- Focus 1.25' to Infinity
- 77mm filter diameter
- Weight 33.6 oz

* Price After Rebate

## Canon
**Canon EOS Flash System (USA)**

Expires 1-17-09

| | | | |
|---|---|---|---|
| 220EX | 125.95 | | |
| 430EX II | *$30 Rebate* | 580EX II | *$50 Rebate* |
| MR-14EX Ringlight | 470.00 | | |
| MT-24EX Twin Flash | 685.00 | | |

| Canon EF-S Lenses *For Digital Only* | IMP | USA |
|---|---|---|
| *Compatible with the 20D, 30D, 40D, 50D & Digital Rebel only* | | |
| 60/2.8 USM Macro (52ø) | 384.95 | 370.00* |
| 10-22/3.5-4.5 USM (77ø) | 689.95 | 660.00* |
| 17-55/2.8 **IS** USM (67ø) | 999.95 | 960.00* |
| 17-85/4-5.6 **IS** USM (67ø) | 499.95 | 515.00 |
| 18-55/3.5-5.6 **IS** USM (58ø) | — | 170.00 |
| 18-200/3.5-5.6 **IS** (72ø) | — | *$50 Rebate* |
| 55-250/4.0-5.6 **IS** USM (58ø) | CALL | CALL |

| Canon EF Lenses | IMP | USA |
|---|---|---|
| 15/2.8 | 599.95 | 610.00 |
| 20/2.8 USM (72ø) | 429.95 | 445.00 |
| 24/2.8 (58ø) | 294.95 | 305.00 |
| 28/2.8 (52ø) | 174.95 | 180.00 |
| 28/1.8 USM (58ø) | 404.95 | 420.00 |
| 35/2 (52ø) | 229.95 | 240.00 |
| 50/1.8 (52ø) | 84.95 | 89.95 |
| 50/1.4 USM (58ø) | 314.95 | 325.00 |
| 50/2.5 Macro (52ø) | 239.95 | 250.00 |
| MP-E 65/2.8 1x-5x Macro (58ø) | 839.95 | 865.00 |
| 85/1.8 USM (58ø) | 344.95 | 355.00 |
| 100/2.8 USM Macro (58ø) | 469.95 | 455.00* |
| 100/2 USM (58ø) | 394.95 | 410.00 |
| 135/2.8 Soft Focus (52ø) | 284.95 | 295.00 |
| 400/4.0 **DO IS** (52ø rear) | 5349.95 | 5500.00 |
| 24-85/3.5-4.5 USM (67ø) | 309.95 | 322.00 |
| 28-90/4.0-5.6 III (58ø) | 89.95 | 99.95 |
| 28-105/3.5-4.5 II USM (58ø) | 219.95 | 229.95 |
| 28-135/3.5-5.6 **IS** USM (72ø) | 399.95 | 409.95 |
| 28-200/3.5-5.6 USM (72ø) | 359.95 | 375.00 |
| 70-300/4.5-5.6 **DO IS** USM (58ø) | 1159.95 | 1190.00 |
| 70-300/4-5.6 **IS** USM (58ø) | 529.95 | 499.00* |
| 75-300/4.0-5.6 III (58ø) | 154.95 | 159.95 |
| 75-300/4.0-5.6 III USM (58ø) | 189.95 | 200.00 |
| 100-300 4.5-5.6 USM (58ø) | 279.95 | 295.00 |

| Canon TS-E MF Lenses | IMP | USA |
|---|---|---|
| 24/3.5 **"L"** | 1129.95 | 1150.00 |
| 45/2.8 | 1129.95 | 1150.00 |
| 90/2.8 | 1129.95 | 1150.00 |

| Canon EF "L" Lenses | IMP | USA |
|---|---|---|
| 14/2.8 USM II | 2029.95 | 2049.00 |
| 24/1.4 (77ø) | 1149.95 | 1170.00 |
| 35/1.4 USM (72ø) | 1159.95 | 1180.00 |
| 50/1.2 USM (72ø) | 1379.95 | 1400.00 |
| 85/1.2 USM II (72ø) | 1829.95 | 1870.00 |
| 135/2.0 USM II (72ø) | 909.95 | 935.00 |
| 180/3.5 USM Macro (72ø) | 1269.95 | 1300.00 |
| 200/2.8 USM (72ø) | 669.95 | 695.00 |
| 300/4.0 **IS** USM (77ø) | 1189.95 | 1125.00* |
| 300/2.8 **IS** USM (52ø rear) | 3999.95 | 4100.00 |
| 400/2.8 **IS** (52ø rear) | 6659.95 | 6800.00 |
| 400/5.6 USM (77ø) | 1099.95 | 1140.00 |
| 500/4 **IS** USM (52ø rear) | 5639.95 | 5800.00 |
| 600/4.0 **IS** (52ø rear) | 7399.95 | 7600.00 |
| 16-35/2.8 USM II (82ø) | 1424.95 | 1350.00* |
| 17-40/4.0 USM (77ø) | 669.95 | 650.00* |
| 24-70/2.8 USM (77ø) | 1159.95 | 1110.00* |
| 24-105/4 **IS** USM (77ø) | 1039.95 | 1059.00 |
| 28-300/3.5-5.6 **IS** USM (77ø) | 2199.95 | 2300.00 |
| 70-200/4.0 USM (67ø) | 579.95 | 600.00 |
| 70-200/4.0 **IS** USM (77ø) | 1069.95 | 1025.00* |
| 70-200/2.8 USM (77ø) | 1169.95 | 1110.00* |
| 70-200/2.8 **IS** USM (77ø) | 1649.95 | 1574.00* |
| 100-400/4.5-5.6 **IS** USM (77ø) | 1419.95 | 1360.00* |
| 1.4x II Teleconverter | 279.95 | 265.00* |
| 2x II Teleconverter | 279.95 | 265.00* |

### *NEW CANON REBATES!*

| AF Flashes | USA Price | Less Rebate | Final Cost |
|---|---|---|---|
| 430 EX | Call | **$30** | **Call** |
| 430 EX II | Call | **$30** | **Call** |
| 580 EX II | Call | **$50** | **Call** |
| **Digital EF-S Lenses** | | | |
| 60/2.8 USM Macro | 400.00 | **$30** | $370.00 |
| 10-22/3.5-4.5 USM | 710.00 | **$50** | $660.00 |
| 17-55/2.8 **IS** USM | 1030.00 | **$70** | $960.00 |
| 18-200/3.5-5.6 **IS** | Call | **$50** | **Call** |
| **AF Lenses** | | | |
| 100/2.8 USM Macro | 490.00 | **$35** | $455.00 |
| 70-300/4-5.6 **IS** USM | 549.00 | **$50** | $499.00 |
| **AF "L" Lenses** | | | |
| 300/4.0 **IS** USM | 1210.00 | **$85** | $1125.00 |
| 16-35/2.8 USM II | 1450.00 | **$100** | $1350.00 |
| 17-40/4.0 USM | 700.00 | **$50** | $650.00 |
| 24-70/2.8 USM | 1190.00 | **$80** | $1110.00 |
| 70-200/4.0 **IS** USM | 1100.00 | **$75** | $1025.00 |
| 70-200/2.8 USM | 1190.00 | **$80** | $1110.00 |
| 70-200/2.8 **IS** USM | 1699.00 | **$125** | $1574.00 |
| 100-400mm **IS** USM | 1460.00 | **$100** | $1360.00 |
| 1.4x II Teleconverter | 290.00 | **$25** | $265.00 |
| 2x II Teleconverter | 290.00 | **$25** | $265.00 |

**USA** = Imported & Warrantied by Canon USA
**IMP** = Imported & Warrantied by B&H (not qualified for Canon USA Rebates & Warranties)

## Nikon D40

**"D-SLR" Digital SLR Camera**

- ***Compact and Lightweight***
- 6.1 MegaPixels
- 2.5" LCD Monitor • SLR Viewfinder
- SD/SDHC (High Capacity) Card Slot
- Accepts Nikon AF Lenses (1.5x factor)
- Auto or Manual Focus • USB 2.0
- Program, Digital Vari-Program, Aperture, Shutter, Manual, Exposure Compensation, Bracketing
- ISO 200-1600 • Uses EN-EL9 Battery
- ***Nikon Inc. limited warranty included***
- Dimensions 3.7 x 5 x 2.5"
- Weight 17 oz Body Only

D40 Kit with 18-55mm DX.....#NID401855

## Nikon D60

**"D-SLR" Digital SLR Camera**

- 10.2 MegaPixels
- 2.5" LCD Monitor • SLR Viewfinder
- Accepts Nikon AF Lenses (1.5x factor)
- SD/SDHC Card Slot
- Built-in Speedlight
- Integrated Dust Reduction System
- 8 Digital Vari-Program Modes
- Stop-Motion Video • 3 fps Burst
- In-Camera Image Editing & RAW Processing • ISO 100-1600
- USB 2.0 • Uses EN-EL9 Battery
- ***Nikon Inc. limited warranty included***
- Dimensions 3.7 x 5.0 x 2.5"
- Weight 17 oz Body Only

D60 Kits
with 18-55mm **VR**.....#NID601855
with 18-55mm & 55-200mm **VR**.....#NID601855200

## Nikon D80

**"D-SLR" Digital SLR Camera**

- 10.2 MegaPixels • Hot Shoe
- 2.5" LCD Monitor • SLR viewfinder
- Uses Nikon AF Lenses (1.5x factor)
- SD/SDHC (High Capacity) Card Slot
- Auto or Manual Focus • 5 fps Burst
- Program, Aperture, Shutter, Bracketing, Manual, Exposure Compensation • USB 2.0
- Optional Wireless Transmitter
- ISO 100-1600 • Uses EN-EL3e battery
- ***Nikon Inc. limited warranty included***
- Dimensions 4.1 x 5.2 x 3"
- Weight 20.6 oz. body only

D80 Body Only.....#NID80
Kit w/18-135mm DX..#NID20018135

## Nikon D300

**"D-SLR" Digital SLR Camera**

***Self-Cleaning Sensor***

- 12.3 MegaPixels • 3" LCD Monitor
- Live View • HDMI video out
- Accepts Nikon AF Lenses (1.5x factor)
- CF, MD Card Slot • 6 fps Burst
- Auto or Manual Focus • USB 2.0
- Live View Shooting • 51-Point AF
- 14-Bit A/D Conversion
- Shutter Rated to 150,000 Cycles
- 200-3200 ISO (100-6400 with Boost)
- Uses EN-EL3e battery
- ***Nikon Inc. limited warranty included***
- Dimensions 4.5 x 5.8 x 2.9"
- Weight 29.2 oz. body only

D300 Body Only.....#NID300
Kit with
18-135mm DX.....#NID30018135
18-200mm DX **VR**...#NID30018200

## Nikon D90

**"D-SLR" Digital SLR Camera**

- ***D-Movie mode – record 720p HD movie clips*** • Self Cleaning Sensor
- 12.3 MegaPixels • GPS geo-tagging
- 3.0" LCD Monitor • SLR viewfinder
- Uses Nikon AF Lenses (1.5x factor)
- SD/SDHC (High Capacity) Card Slot
- Auto or Manual Focus • 4.5 fps Burst
- In-Camera Image Editing
- Scene Recognition System
- Active D-Lighting • USB 2.0
- ISO 100-3200 • Uses EN-EL3e battery
- ***Nikon Inc. limited warranty included***
- Dimensions 5.2 x 4.1 x 3"
- Weight 22 oz. body only

D90 Body Only.....#NID90
Kit with 18-105mm **VR** Lens.....#NID9018105

## Nikon D700

**"D-SLR" Digital SLR Camera**

- Self Cleaning Sensor
- 12.1 MegaPixels • Live View
- 3" VGA LCD Monitor • SLR viewfinder
- Uses Nikon AF Lenses
- FX-format CMOS (full frame)
- CompactFlash Card Slot
- Dust and Water Resistant
- Picture Control Settings • 5 fps Burst
- 51-point AF System • HDMI Video Out
- Active D-Lighting Mode • USB 2.0
- ISO 6400 • Uses EN-EL3e battery
- ***Nikon Inc. limited warranty included***
- Dimensions 4.8 x 5.8 x 3.0"
- Weight 33.6 oz. body only

D700 Body Only.....#NID700
Kit with 24-120mm **VR** Lens.....#NID70024120

# SLR Lenses & Flashes

Quick Dial 64

## Nikon 12-24mm f/4 DX ED-IF G AF-S Super Wide Zoom AF Lens

- ***Exclusively designed for use with Digital SLRs***
- Silent Wave Motor
- ED (Extra-low Dispersion)
- IF (Internal Focusing)
- 35mm equiv. 18-36mm
- Minimum focus 11.8"
- 77mm filter diameter
- Weight 17.6 oz

## Nikon 24-70mm f/2.8 G AF-S ED-IF Wide Zoom AF Lens

- Optimized for edge-to-edge sharpness on both the Nikon FX (full-frame) & DX-format image sensors
- Rugged construction, dust and moisture resistance
- Minimum focus 1.2'
- 77mm filter diameter
- Weight 32 oz

## Nikon 18-200mm f/3.5-5.6 DX G AF-S ED-IF Digital Lens

- ***Exclusively designed for use with Digital SLRs***
- 35mm equiv. 27-300mm
- VR II Vibration Reduction
- SWM (Silent Wave Motor)
- 3.5-22 f/Stop Range
- Focus 1.6' to Infinity
- 72mm filter diameter
- Weight 19.8 oz

## Nikon 24mm f/3.5 D ED PC-E Ultra-Wide Lens with

- Compatible with digital and 35mm SLR cameras
- Ideal for architectural and nature photography
- "Perspective Control" tilt and shift functions
- Minimum focus 0.7'
- 77mm filter diameter
- Weight 25.6 oz

## Nikon

| Nikon AF Flashes | IMP | USA |
|---|---|---|
| SB-400 | CALL | CALL |
| SB-600 | CALL | CALL |
| SB-800 | CALL | CALL |
| SB-900 | CALL | CALL |
| R1 Wireless Twin Flash | CALL | CALL |
| R1C1 Wireless Twin Flash System | CALL | CALL |

### Nikon DX ED-IF Lenses for Digital Only

| | |
|---|---|
| 10.5/2.8 Fish-Eye | CALL |
| 12-24/4 G AF-S (77ø) | CALL |
| 16-85/3.5-5.6 G AF-S **VR** (67ø) | CALL |
| 17-55/2.8 G AF-S (77ø) | CALL |
| 18-55/3.5-5.6 G AF-S (52ø) | CALL |
| 18-55/3.5-5.6 G AF-S **VR** (52ø) | CALL |
| 18-70/3.5-4.5 G AF-S (67ø) | CALL |
| 18-135/3.5-5.6 G AF-S (67ø) | CALL |
| 18-200/3.5-5.6 G AF-S (72ø) | CALL |
| 55-200/4-5.6 G AF-S (67ø) | CALL |
| 55-200/4-5.6 G AF-S **VR** (67ø) | CALL |

| Nikon D-Type AF Lenses | IMP | USA |
|---|---|---|
| 14/2.8 D ED | 1339.95 | 1419.95 |
| 16/2.8 D (39ø) with Hood | 699.95 | 769.95 |
| 20/2.8 D (62ø) | 469.95 | 489.95 |
| 24/2.8 D (52ø) | 299.95 | 309.95 |
| 24/3.5 D ED **PC-E** (77ø) | CALL | CALL |
| 28/2.8 D (52ø) | 224.95 | 234.95 |
| 35/2.0 D (52ø) | 299.95 | 319.95 |
| 45/2.8 D ED **PC-E** Micro (77ø) | CALL | CALL |
| 50/1.8 D (52ø) | 104.95 | 109.95 |
| 50/1.4 D (52ø) | CALL | CALL |
| 60/2.8 D Micro (62ø) (1:1) | CALL | CALL |
| 60/2.8 G AF-S ED Micro (62ø) | 469.95 | 479.95 |

| Nikon D-Type AF Lenses | IMP | USA |
|---|---|---|
| 85/1.8 D (62ø) with Hood | 379.95 | 399.95 |
| 85/1.4 D IF (77ø) | 939.95 | 1024.95 |
| 85/2.8 **PC-E** Micro (77ø) | CALL | CALL |
| 105/2.8 G AF-S ED-IF **VR** Micro (62ø) | 749.95 | 759.95 |
| 105/2.0 DC D with Hood (72ø) | 839.95 | 924.95 |
| 135/2.0 DC D (72ø) | 969.95 | 1069.95 |
| 180/2.8 D ED-IF (72ø) | 699.95 | 749.95 |
| 200/2 G AF-S ED-IF **VR** (52ø) | 3949.95 | 3999.95 |
| 200/4 D ED-IF Micro w/Case (62ø) | 1249.95 | 1349.95 |
| 300/4.0 D AF-S ED-IF (77ø) | 1024.95 | 1124.95 |
| 300/2.8 G AF-S **VR** (52ø-R) | CALL | 4499.00 |
| 400/2.8 G AF-S **VR** ED (52ø) | CALL | CALL |
| 500/4.0 G AF-S **VR** ED (52ø) | CALL | CALL |
| 600/4.0 G AF-S **VR** ED (52ø) | CALL | CALL |
| 14-24/2.8 G AF-S ED-IF | 1519.95 | 1539.95 |
| 17-35/2.8 (77ø) | 1369.95 | 1499.95 |
| 24-70/2.8 G AF-S ED-IF (77ø) | CALL | CALL |
| 24-85/2.8-4.0 D (72ø) | 499.95 | 564.95 |
| 24-120/3.5-5.6 G AF-S **VR** (72ø) | 489.95 | 509.95 |
| 70-200/2.8 G AF-S ED-IF **VR** (77ø) | 1599.95 | 1629.95 |
| 70-300/4.0-5.6 G (62ø) | 124.95 | 139.95 |
| 70-300/4.5-5.6 G-AFS **VR** (67ø) | 469.95 | 479.95 |
| 80-200/2.8 D with Collar (77ø) | 899.95 | 924.95 |
| 80-400/4.5-5.6 D **VR** (77ø) | 1374.95 | 1419.95 |
| 200-400/4 G AF-S ED-IF **VR** (52ø) | 5099.95 | 5199.95 |
| TC-14E II (1.4x) Teleconverter | 359.95 | 409.95 |
| TC-17E II (1.7x) Teleconverter | 359.95 | 419.95 |
| TC-20E II (2x) Teleconverter | 359.95 | 429.95 |

**USA** = Imported & Warrantied by Nikon USA (AF lenses include 1 year warranty plus 4 years extended service coverage)
**IMP** = Imported & Warrantied by B&H (not qualified for Nikon USA Rebates & Warranties)

## Nikon SB-800 Speedlight i-TTL Shoe Mount Flash

- Guide No. 125'
- Recycling Time 2.7 Secs
- Bounce & Swivel Head
- Zoom Head (24-105mm)
- Multiple Flash Exposure Modes
- Safety lock on flash shoe
- Weight 12.3 oz

## Nikon SB-900 Speedlight i-TTL Shoe Mount Flash

- Guide No. 131'
- Recycling Time 4.5 Secs
- Bounce & Swivel Head
- Zoom Head (17-200mm)
- Stroboscopic Effect
- AF-Assist Illuminator
- Safety lock on flash shoe
- Weight 14.6 oz

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source

B&H Online
bhphotovideo.com

- Support, before and after sale
- Online live support
- Massive online presence
- Huge inventory available for worldwide shipping
- Educate yourself in our product resource center

One hour free parking at 349 west 34th st.

For a free catalog, call 800-947-6933, 212-444-6633, write or go online.

Seven day customer satisfaction guarantee!

Corporate accounts welcome

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source

B&H Phones
800-947-9980
212-444-6666
Fax:
212-239-7770
To Inquire About Your Order Call:
800-221-5743
212-239-7765
or Fax:
866-521-7375
212-502-9426

B&H Store
420 Ninth Ave.
Corner of 34th Street
New York, N.Y.
10001

Store & Mail Order Hours:
Sunday 10-5
Mon.-Thurs. 9-7
Friday 9-1
Saturday Closed

Most orders shipped within 24 hours

Overnight service available

All items are complete with all accessories as supplied by manufacturer.

Used equipment bought, sold and traded

Equipment leasing available



Quick Dial 64

10 MegaPixels

E-520 Body Only ..... #OLEE520
E-520 Kit with 14-42mm Zuiko Lens ..... #OLEE5201442

## OLYMPUS Evolt E-520

**"D-SLR" Digital SLR Camera**

- ***In-Body Image Stabilization***
- ***Supersonic Wave Filter Anti-dust System*** • Capture in JPEG or RAW
- 10 MegaPixels • SLR viewfinder
- 2.5" Live View LCD monitor
- ***4/3 Full Frame Zuiko Specific Lenses***
- CF & XD Dual Card Slots
- Select ISO 100-1600
- 20 Easy-to-use Scene-select Modes
- 3.5 fps Burst • Face Detection
- Shadow Adjustment
- USB 2.0 • Uses BLM-1 Battery
- Dimensions 3.6 x 5.4 x 2.7"
- Weight 16.5 oz Body Only

10 MegaPixels

K20D Super Body Only ..... #PEK200D
Kit w/18-55mm Lens #PEK200D1855

## PENTAX K200D Super

**"D-SLR" Digital SLR Camera**

- ***Sensor-Shift Shake Reduction***
- ***Weather and Dust Resistant***
- 10.2 Megapixels
- 2.7" LCD Monitor • SLR viewfinder
- Uses Pentax AF Lenses (1.5x factor)
- SD/SDHC (High Capacity) Card Slot
- Dust Removal System
- Effective Noise Reduction
- PictBridge Compatible
- Auto Picture Mode • USB 2.0
- ISO 100-1600 • 2.8 fps Burst
- Powered by AA-size Batteries
- Dimensions 3.7 x 5.2 x 2.9"
- Weight 22.2 oz. body only

10 MegaPixels

E3 Body Only ..... #OLE3

## OLYMPUS E3

**"D-SLR" Digital SLR Camera**

- ***Supersonic Wave Filter***
- 10.1 MegaPixels • TruePic III Digital Image Processing System • Rugged Weatherproof Magnesium-alloy Construction • CF & XD Card Slots
- 2.5" Dual-axis, Free-angle LCD
- SLR viewfinder • Live View Function
- ***4/3 Full Frame Zuiko Specific Lenses***
- In Camera Blur Reduction
- Auto or Manual Focus • USB 2.0
- 5 fps Burst • Select ISO 100-3200
- Uses BLM-1 Lithium-ion Battery
- Dimensions 5.6 x 4.6 x 2.9"
- Weight 28.7 oz. Body Only

10 MegaPixels

Alpha A200 Kits with 18-70mm ..... #SODSLRA200K
with 18-70mm and 75-300mm ..... #SODSLRA200W

## SONY Alpha A200

**"D-SLR" Digital SLR Camera**

- ***Super SteadyShot image stabilization and dust reduction***
- 10.2 MegaPixels • SLR viewfinder
- 2.7" ClearPhoto LCD monitor
- Uses Sony Alpha & Minolta Maxxum Lenses (1.5x factor) • CF Card Slot
- Anti-dust Protection • USB 2.0
- D-Range Optimizer (DRO)
- 3 fps Continuous Burst
- Eye-Start Autofocus
- ISO 100-3200 Sensitivity
- Uses NP-FM500H Battery
- Dimensions 3.9 x 5.2 x 2.8"
- Weight 18.8 oz. body only

10 MegaPixels

Kit with Leica D Vario-Elmarit 14-50/2.8-3.5 MEGA O.I.S. Aspherical ..... #PADMCL10K

## Panasonic Lumix DMC-L10

**"D-SLR" Digital SLR Camera**

***Four-Thirds System (17.3 x 13mm) CCD***

- 10.1 MegaPixels • 3 fps Shooting Speed
- 2.5" free-angle LCD Monitor rotates 180° horizontally and 270° vertically
- SLR viewfinder • Dust Reduction System
- Uses ***4/3 Full Frame Leica-Panasonic-Olympus Lenses*** (1.5x factor)
- SD/SDHC (High Capacity) Card Slot
- Auto or Manual Focus • ISO 100-1600
- SILKYPIX Developer Studio
- USB 2.0 • Li-ion Battery Pack
- 3.8 x 5.3 x 3" • Wt. 17 oz. body only

12 MegaPixels

A700 Body Only ..... #SODSLRA700
Kit with 18-70mm ..... #SODSLRA700K
Kit with 16-105mm ..... #SODSLRA700P

## SONY Alpha A700

**"D-SLR" Digital SLR Camera**

- ***Super SteadyShot image stabilization and dust reduction***
- 12.2 MegaPixels • 5 fps Burst
- 3" LCD monitor • SLR viewfinder
- Uses Sony Alpha ***(compatible with Minolta A-type bay mount)*** Lenses (1.5x factor) • Program AE, Shutter Priority, Aperture Priority, Manual, Exposure Compensation, Bracketing
- CF & MS Card Slots • USB 2.0
- Auto or Manual Focus, Eye Start AF
- ISO 100-1600 (up to 6400 w/ Boost)
- Uses NP-FM500H Lithium-ion Battery
- 5.6 x 4.3 x 3.3" • Wt 24 oz. Body Only

Quick Dial 61

## Digital Picture Frames

**Smartparts**
**15" Walnut Digital Frame**
- 1024 x 768 Screen Resolution
- 256MB built-in memory
- Accepts all popular memory cards
- Multimedia Presentation

#SMDPF15WW

**Kodak**
**EasyShare 8" Digital Frame**
- PictBridge Enhanced Multimedia Display
- 800 x 480 Screen Resolution
- 128MB built-in memory
- CF I/II, SD/MMC, MS, xD Card Slots

#KOFD8

**Aluratek**
**11" Wood Digital Frame**
- 1024 x 768 Screen Resolution
- 1GB Included SD Memory
- Accepts all popular memory cards
- Mosaic view option
- Includes wireless remote

#ALDPF11

**SONY**
**DPF-V900 9" Digital Frame**
- Automatic rotation of images
- 800 x 480 Screen Resolution
- 512MB built-in memory
- Accepts all popular memory cards

#SOF9

Quick Dial 64

## SLR Lenses & Flashes

### OLYMPUS

**Flash System**

| | |
|---|---|
| FL-20 Flash | 114.95 |
| FL-36R Flash | 229.95 |
| FL-50R Flash | 429.95 |
| RF-11 Ring Flash | 229.95 |
| SRF-11 Ring Flash Set | 479.95 |
| TF-22 Twin Flash | 449.95 |
| STF-22 Twin Flash Set | 629.95 |

**Zuiko 4/3 System Digital Lenses for E-1 & Evolt Cameras**

| | |
|---|---|
| 8/3.5 Fish-eye | 659.95 |
| 35/3.5 Macro (52ø) | 189.95 |
| 50/2.0 Macro (77ø) | 406.95 |
| 150/2.0 EP (82ø) | 2099.95 |
| 300/2.8 ED | 5894.95 |
| 7-14/4.0 ED (72ø) | 1511.95 |
| 11-22/2.8-3.5 ED (72ø) | 649.95 |
| 12-60/2.8-4 ED SWD (72ø) | 799.95 |
| 14-42/3.5-5.6 EZ (58ø) | 239.95 |
| 14-54/2.8-3.5 (67ø) | 399.95 |
| 18-180/3.5-6.3 ED (62ø) | 399.95 |
| 35-100/2.0 ED (77ø) | 2099.95 |
| 40-150/4-5.6 (58ø) | 279.95 |
| 90-250/2.8 ED (105ø) | 5189.95 |
| EC-14 1.4x Teleconverter | 384.95 |
| EC-20 2x Teleconverter | 479.95 |
| MF-1 OM Lens Adapter | 99.95 |

### PENTAX

**AF Flash System**

| | |
|---|---|
| AF-360FGZ | 219.95 |
| AF-540FGZ | 339.95 |

**SMCP-DA Digital AF Lenses**

| | |
|---|---|
| 14/2.8 ED IF (77ø) | 599.95 |
| 21/3.2 AL Limited *"Pancake"* (49ø) | 424.95 |
| 35/2.8 Macro Limited (49ø) | 489.95 |
| 40/2.8 Limited *"Pancake"* (49ø) | 269.95 |
| 70/2.4 Limited *"Pancake"* (49ø) | 479.95 |
| 200/2.8 ED IF | 949.95 |
| 300/4.0 ED IF SDM (77ø) | 1169.95 |
| 10-17/3.5-4.5 ED IF (77ø) | 429.95 |
| 12-24/4 ED AL IF (77ø) | 699.95 |
| 16-45/4 ED AL (67ø) | 399.95 |
| 16-50/2.8 ED AL IF SDM (77ø) | 699.95 |
| 18-55/3.5-5.6 AL II (52ø) | 149.95 |
| 18-250/3.5-6.3 ED IF AL (62ø) | 449.95 |
| 50-135/2.8 ED IF SDM (67ø) | 749.95 |
| 50-200/4-5.6 ED (52ø) | 219.95 |
| 55-300/4-5.8 ED (58ø) | 399.95 |

**AF Lenses for 35mm & Digital SLRs**

| | |
|---|---|
| 31/1.8 Limited (58ø) | 869.95 |
| 35/2.0 AL (49ø)4-5.6 | 299.95 |
| 43/1.9 Limited *"Pancake"* (49ø) | 469.95 |
| 50/1.4 (49ø) | 199.00 |
| 50/2.8 Macro (52ø) with Case | 394.95 |
| 77/1.8 Limited (49ø) | 679.00 |
| 100/2.8 D FA Macro (49ø) | 524.95 |
| 28-80/3.5-5.6 J FA AL (58ø) | 59.95 |

### SONY

**Compatible with Maxxum D-SLRs**
**Flash System**

| | |
|---|---|
| HVL-F36AM | 199.99 |
| HVL-F56AM | 449.99 |

**Digital Lenses**

| | |
|---|---|
| 16/2.8 Fish-eye | 799.99 |
| 20/2.8 (72ø) | 559.99 |
| 28/2.8 (49ø) | 249.99 |
| 35/1.4 (55ø) | 1299.99 |
| 50/1.4 (55ø) | 349.99 |
| 50/2.8 Macro (55ø) | 449.99 |
| 85/1.4 *Carl Zeiss* (72ø) | 1299.99 |
| 100/2.8 Macro (55ø) | 639.99 |
| 135/1.8 *Carl Zeiss* (77ø) | 1399.99 |
| 135/2.8 STF (72ø) | 1199.99 |
| 300/2.8 G APO | 5999.99 |
| 500/8 Reflex | 699.99 |
| 11-18/4.5-5.6 DT (77ø) | 649.99 |
| 16-80/3.5-4.5 DT *Carl Zeiss* (62ø) | 699.99 |
| 18-70/3.5-5.6 DT (55ø) | 199.99 |
| 18-200/3.5-6.3 DT (62ø) | 499.99 |
| 24-105/3.5-4.5 D (62ø) | 469.99 |
| 70-200/2.8 G APO (77ø) | 1799.99 |
| 75-300/4.5-5.6 (55ø) | 229.99 |
| 1.4x Teleconverter | 449.99 |
| 2x Teleconverter | 449.99 |

## heliopan

Made exclusively with glass from Schott (Zeiss) the world's finest optical glass supplier

| Schott Glass in Brass Rings | 55 | 58 | 62 | 67 | 72 | 77 |
|---|---|---|---|---|---|---|
| Skylight (1B), UV | 32.75 | 34.25 | 45.00 | 51.25 | 63.00 | 73.75 |
| Skylight (1B), UV SH-PMC | 59.75 | 65.00 | 78.25 | 85.50 | 108.50 | 120.50 |
| Polarizer (Rotating) | 57.25 | 64.50 | 71.00 | 84.50 | 95.00 | 99.50 |
| Circular Polarizer | 85.50 | 89.75 | 96.75 | 112.00 | 134.00 | 153.00 |
| Circular Polarizer SH-PMC | 128.00 | 135.00 | 146.75 | 167.25 | 185.50 | 212.75 |
| Circular Polarizer Slim | 85.50 | 89.75 | 96.75 | 112.00 | 134.00 | 153.00 |
| #5 Lt Yel, #8 Yel, #25 Lt Red, #13 Green | 32.75 | 34.25 | 45.00 | 51.25 | 63.00 | 73.75 |
| #11 Yel/Grn, #15 Dark Yel, #22 Orange | 32.75 | 34.25 | 45.00 | 51.25 | 63.00 | 73.75 |
| 81A, 81B, 81C | 32.75 | 34.25 | 45.00 | 51.25 | 63.00 | 73.75 |
| Digital Filter | 138.00 | 141.50 | 145.00 | 168.75 | 200.00 | 236.00 |

## B+W

**B&H SPECIAL!** Buy 3 or more B+W Filters & Get 5% Off.

| | 55 | 58 | 62 | 67 | 72 | 77 |
|---|---|---|---|---|---|---|
| UV, KR1.5 | 25.95 | 25.95 | 29.95 | 38.95 | 44.95 | 51.95 |
| UV, KR1.5 Multi-Coated | 39.95 | 39.95 | 46.95 | 54.95 | 68.50 | 93.95 |
| UV, KR1.5 Slim W.A. Multi-Coated | 74.95 | 84.95 | 97.95 | 103.95 | 119.95 | 112.95 |
| Circular Polarizer | 66.95 | 68.95 | 72.95 | 86.50 | 99.50 | 111.95 |
| Circular Polarizer Multi-Coated | 96.50 | 99.50 | 104.95 | 124.50 | 143.50 | 169.95 |
| Circular Polarizer Slim W.A. | 54.95 | 59.95 | 72.50 | 79.95 | 93.50 | 99.50 |
| Kaesemann Circular Polarizer | 102.95 | 104.95 | 117.50 | 139.95 | 157.95 | 189.95 |
| 81A, B, KR3, 6, 12, 15 | 22.95 | 24.95 | 29.95 | 36.95 | 46.95 | 52.95 |
| KB1.5, 3, 6, 12, 15, 20 | 25.95 | 25.95 | 29.95 | 38.95 | 44.95 | 51.95 |
| #021, 022, 023, 040, 041, 060, 061, 081, 090 | 25.95 | 25.95 | 29.95 | 38.95 | 44.95 | 51.95 |
| For Infrared Film 092, 093, 489 | 99.95 | 99.95 | 99.95 | 124.95 | 144.95 | 166.95 |
| Graduated (N.D. & Colors) | 52.95 | 54.95 | 57.95 | 64.95 | 74.95 | 92.95 |
| ND .3 (101), .6 (102) | 25.95 | 25.95 | 29.95 | 38.95 | 44.95 | 51.95 |
| ND .9 (103), 1.8 (106) | 44.95 | 44.95 | 69.95 | 69.95 | 89.50 | 99.95 |
| ND 3.0 (110), 4.0 (113), 6.0 (120) | 44.95 | 44.95 | 69.95 | 69.95 | 89.50 | 99.95 |
| Enhancing | 43.95 | 45.95 | 72.95 | 74.95 | 94.95 | 104.95 |
| Close-Up Lenses 0.25, 0.50, 1, 2, 3, 4, 5 | 25.95 | 25.95 | 29.95 | 38.95 | 44.95 | 51.95 |

## cokin

**B&H SPECIAL!** Buy 3 or more Cokin Filters & Get 10% Off.

Cokin universal filter holder system allows you to use 1 of 160 different filters on many different sized lenses. Works with all lenses of SLR cameras (35mm or Digital) There are 3 different Series in the COKIN System.

**"A" Series**— for lens diameters from 36mm to 62mm
**"P" Series**— for lens diameters from 48mm to 82mm
**"Z-PRO" Series**— for lens diameters from 49mm to 96mm

| Series | "A" | "P" | Z-Pro |
|---|---|---|---|
| 001 Yellow | 16.49 | 22.54 | 43.99 |
| 002 Orange | 16.49 | 22.54 | 43.99 |
| 003 Red | 16.49 | 22.54 | 43.99 |
| 004 Green | 16.49 | 22.54 | 43.99 |
| 005 Sepia | 16.49 | 22.54 | 43.99 |
| 006 Yellow-Green | 16.49 | 22.54 | 43.99 |
| 020 Blue 80A | 17.04 | 23.64 | 43.99 |
| 021 Blue 80B | 17.04 | 23.64 | 43.99 |
| 022 Blue 80C | 17.04 | 23.64 | 43.99 |
| 023 Blue 82A | 17.04 | 23.64 | 43.99 |
| 024 Blue 82B | 17.04 | 23.64 | 43.99 |
| 026 Warm 81A | 17.04 | 23.64 | 43.99 |
| 027 Warm 81B | 17.04 | 23.64 | 43.99 |
| 028 Warm 81C | 17.04 | 23.64 | 43.99 |
| 029 Orange 85A | 17.04 | 23.64 | 43.99 |
| 030 Orange 85B | 17.04 | 23.64 | 43.99 |
| 035 Warm 81D | 17.04 | 23.64 | 43.99 |
| 036 FLW | 17.04 | 23.64 | 43.99 |
| 045 Sepia Light | 17.04 | 23.64 | 43.99 |
| 046 FLD | 17.04 | 23.64 | 43.99 |
| 047 Gold | 17.04 | 23.64 | — |
| 056 Star 8 | 24.19 | 31.34 | — |
| 057 Star 4 | 24.19 | 31.34 | — |
| 059 Softstar | 24.19 | 31.34 | — |
| 060 CS Incolor 1 | 18.69 | 24.19 | — |
| 063 CS Grey 2 | 18.69 | 24.19 | — |
| 083/830 Diffuser 1 | 21.99 | 25.29 | — |

| Series | "A" | "P" | Z-Pro |
|---|---|---|---|
| 084/840 Diffuser 2 | 21.99 | 25.29 | — |
| 085/850 Diffuser 3 | 21.99 | 25.29 | — |
| 086 Pastel 1 | 21.99 | 25.29 | 54.99 |
| 087 Pastel 2 | 21.99 | 25.29 | 54.99 |
| 103 Close-up +3 | 21.99 | 25.29 | — |
| 120 Grad G1 Grey | 24.19 | 31.89 | — |
| 121 Grad G2 Grey | 24.19 | 31.89 | — |
| 122 Grad B1 Blue | 24.19 | 31.89 | 65.99 |
| 123 Grad B2 Blue | 24.19 | 31.89 | 65.99 |
| 124 T1 Tobacco | 24.19 | 31.89 | 65.99 |
| 125 T2 Tobacco | 24.19 | 31.89 | 65.99 |
| 126 M1 Mauve | 24.19 | 31.89 | — |
| 127 M2 Mauve | 24.19 | 31.89 | — |
| 150 Fog 1 | 24.19 | 32.44 | — |
| 151 Fog 2 | 24.19 | 32.49 | — |
| 152 Grey ND2x | 17.59 | 21.49 | 44.99 |
| 153 Grey ND4x | 17.59 | 23.64 | 49.49 |
| 154 Grey ND8x | 17.59 | 21.49 | 49.49 |
| 160 Linear Pol | 37.39 | 57.74 | — |
| 164 Circular Pol | 51.69 | 104.49 | — |
| 173 VC Blue/Yellow | 40.14 | 63.79 | — |
| 185 Radial Zoom | 19.79 | 26.94 | — |
| 194 Gelatin Holder | 14.29 | 15.39 | — |
| 197 Sunset 1 | 28.04 | 35.19 | 60.49 |
| 198 Sunset 2 | 28.04 | 35.19 | 60.49 |
| 220 Mirage | 49.49 | — | — |
| 346 Double Exposure | 16.49 | 15.39 | — |

**Why Filters for Digital Cameras?** With sophisticated image editing tools like PhotoShop & PHOTO-PAINT, why bother with optical filters? Given enough time, talent and patience, you probably could emulate most filter effects in post-processing, but when would you find time to shoot, eat & sleep?

## HOYA

**B&H SPECIAL!** Buy 3 or more Hoya Filters & Get 10% Off.

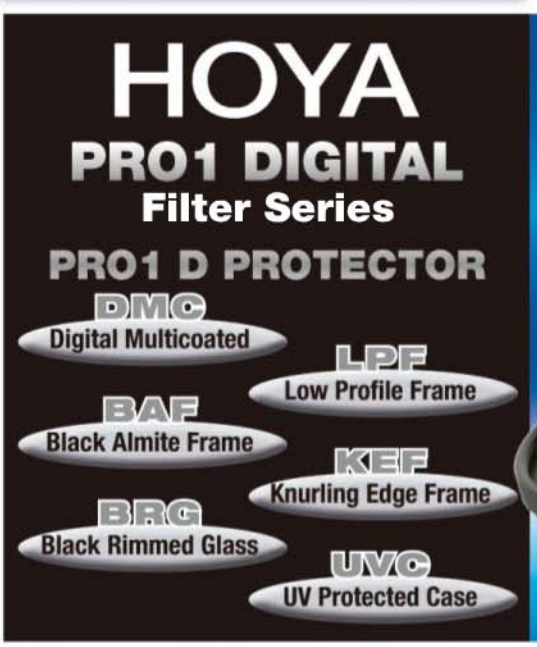
| | 58 | 62, 67 | 72 | 77 | 82 |
|---|---|---|---|---|---|
| UV, Skylight (1B) | 14.85 | 22.35 | 34.35 | 38.85 | 46.35 |
| UV, Skylight (1B) HMC | 22.35 | 32.85 | 40.35 | 49.35 | 62.85 |
| UV, Skylight (1B) Pro 1 Super HMC | 35.85 | 41.85 | 52.35 | 56.85 | 70.35 |
| Polarizer (Rotating) | 22.35 | 34.35 | 41.85 | 50.85 | 61.35 |
| Circular Polarizer | 40.35 | 58.35 | 70.35 | 82.35 | 109.35 |
| Circular Polarizer HMC | 76.35 | 92.85 | 130.35 | 169.35 | 262.35 |
| Circular Polarizer Ultra Thin Super HMC | 83.85 | 101.85 | 149.85 | 187.35 | 281.85 |
| "Moose" Warm Circular Polarizer | 59.85 | 86.85 | 107.85 | 128.85 | 166.35 |
| K2 Yel, X0 Yel/Grn, Grn X1, Or G, Red 25A | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| K2 Yel, X0 Yel/Grn, Grn X1, Or G, Red 25A HMC | 26.85 | 38.85 | 46.35 | 56.85 | 65.85 |
| 80A, B, C, 81A, B, C, 82A, B, C, 85, B, C | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| 80A, B, C, 81A, B, C, 82A, B, C, 85, B, C HMC | 26.85 | 38.85 | 46.35 | 56.85 | 65.85 |
| Close Up Set | 49.35 | 68.85 | 88.35 | 97.35 | — |
| Close-Up Set HMC | 70.35 | 92.85 | — | — | — |
| Cross Screen | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| Diffuser | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| Fluorescent FLD, FLW | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| Fluorescent FL-D, FLW HMC | 26.85 | 38.85 | 46.35 | 56.85 | — |
| Grad Color (Blue, Emerald, Grey, Mauve, Pink, Tobacco, Yellow) | 23.85 | — | — | — | — |
| Intensifier – Blue, Green Field, Enhancement (Red) | 49.35 | 62.85 | 70.35 | 83.35 | — |
| Neutral Density 2x, 4x, 8x | 20.85 | 32.85 | 40.35 | 49.35 | 61.35 |
| Neutral Density 2x, 4x, 8x HMC | 26.85 | 38.85 | 46.35 | 56.85 | 65.85 |
| Soft A, B | 34.35 | 49.35 | 56.85 | 59.85 | — |
| Soft Spot Set | 40.35 | 53.85 | 62.85 | 70.35 | — |
| Star 6, Star 8 | 26.85 | 40.35 | 46.35 | 53.85 | — |

## TIFFEN

**B&H SPECIAL!** Buy 3 or more Tiffen Filters & Get 10% Off. (Not Valid on Kits)

| | 52, 55 | 58 | 62, 67 | 72, 77 | 82 |
|---|---|---|---|---|---|
| Hot Mirror (for Digital Cameras) | 68.95 | 81.95 | 132.95 | 186.95 | 292.95 |
| UV Protector | 10.95 | 12.39 | 15.95 | 31.95 | 48.95 |
| UV Protector Thin Wide-Angle | — | 18.95 | 23.95 | 48.95 | — |
| Skylight (1A), UV Haze 1 | 10.95 | 13.39 | 16.95 | 30.95 | 45.95 |
| Skylight (1A), UV Haze 1 Thin Wide-Angle | — | 26.95 | 35.95 | 62.95 | — |
| Warm UV, Haze 2A | 24.95 | 26.95 | 37.95 | 66.95 | 92.95 |
| Circular Polarizer (Rotating mount) | 35.95 | 37.95 | 51.95 | 68.95 | 118.95 |
| Circular Polarizer Thin Wide-Angle | — | 68.95 | 93.95 | 125.95 | — |
| Polarizer (Rotating mount) | 17.89 | 21.19 | CALL | 40.95 | 53.09 |
| #8 Yellow, #11 Green, #15 Deep Yellow, #25 Red | 14.95 | 15.95 | 29.95 | 40.95 | 54.95 |
| #12 Yellow, #16 Orange, #21 Orange | 24.95 | 26.95 | 37.95 | 66.95 | 92.95 |
| #23A Lt Red, #29 Dark Red, #47 Blue, #58 Blue | 24.95 | 26.95 | 37.95 | 66.95 | 92.95 |
| Color Conversion 80A, 80B, 81A, 81B | 14.95 | 15.95 | 29.95 | 40.95 | 54.95 |
| Color Conversion 81C, 81EF, 82A, 82B, 85, 85B, 85C | 24.95 | 26.95 | 37.95 | 66.95 | 92.95 |
| #812 Warming | 14.95 | 21.95 | 29.95 | 40.95 | 54.95 |
| #87 Infra-Red | 117.95 | 128.95 | 141.95 | 169.95 | 176.95 |
| Close-Up Lens Sets (+1, +2 & +4) | 46.95 | 59.95 | 77.95 | 110.95 | — |
| Graduated: Blue, Sunrise | 41.95 | 47.95 | 57.95 | 75.95 | — |
| Graduated ND 0.6 | 41.95 | 47.95 | 57.95 | 75.95 | 97.95 |
| Enhancing | 65.95 | 96.95 | 101.95 | 117.95 | 128.95 |
| FL-D Fluorescent (for Daylight Film) | 19.95 | 23.95 | 29.95 | 47.95 | 86.95 |
| Neutral Density 0.3, 0.6, 0.9 | 14.95 | 15.95 | 22.95 | 40.95 | 54.95 |
| Sepia 1, 2, 3 | 37.95 | 44.95 | 57.95 | 75.95 | 94.95 |
| Soft FX 1, 2, 3 | 42.95 | 51.95 | 63.95 | 86.95 | 118.95 |
| Star Effect 4 Pt. 2mm | 27.95 | 30.95 | 48.95 | 82.95 | — |
| Hollywood FX Black Diffusion FX 1/2, 1, 3, 5 | 52.95 | 57.95 | 71.95 | 94.95 | 124.95 |
| Hollywood FX Black Pro Mist 1/2, 1, 2, 3 | 52.95 | 57.95 | 71.95 | 94.95 | 124.95 |
| Hollywood FX North Star | 86.95 | 96.95 | 135.95 | 176.95 | 184.95 |
| Hollywood FX Vector Star | 72.95 | 81.95 | 112.95 | 146.95 | — |
| Hollywood FX Pro Mist 1/2, 1, 2, 3 | 52.95 | 57.95 | 71.95 | 94.95 | 124.95 |
| Hollywood FX Ultra Contrast 3 | 52.95 | 57.95 | 71.95 | 94.95 | 124.95 |
| Hollywood FX Warm Polarizer (Rotating Mount) | 37.95 | 45.95 | 56.95 | 74.95 | 99.95 |
| Hollywood FX Warm Soft FX 1, 2, 3 | 42.95 | 51.95 | 63.95 | 86.95 | 118.95 |

10 Year Warranty Made in U.S.A.




**Protect your valued lenses**

**This is the ultimate in clear filters. It will not affect the color balance or performance of your lenses in the slightest. However, constant use will protect your valued lenses from expensive front element damage which could be caused by dirt, knocks or scratches**

**DESIGNED EXCLUSIVELY FOR DIGITAL CAMERAS**

B&H
PHOTO - VIDEO - PRO AUDIO
The Professional's Source

B&H Online
bhphotovideo.com

- Support, before and after sale
- Online live support
- Massive online presence
- Huge inventory available for worldwide shipping
- Educate yourself in our product resource center

One hour free parking at 349 west 34th st.

For a free catalog, call 800-947-6933, 212-444-6633, write or go online.

Seven day customer satisfaction guarantee!

Corporate accounts welcome

# Meters

## SEKONIC
### L358 Flash Master Meter

- Digital Incident, Reflected and Flash Light Meter
- Weatherproof
- Built-in adjustable incident dome
- Rotating 270° Receptor Head
- Weight 5.4 oz

| | |
|---|---|
| **Kenko** | |
| KFM-1100 Autometer | 229.95 |
| KFM-2100 Flash Meter | 479.95 |
| KCM-3100 Color Meter | 1399.95 |
| **POLARIS** | |
| Polaris Digital Exposure | 179.95 |
| Polaris Dual 5 | 299.95 |
| **GOSSEN** | |
| DigiSix Ultra Compact | 174.95 |
| DigiFlash/Ambient | 244.95 |
| DigiPro F | 299.95 |
| Luna Star F II | 484.95 |
| Color Pro 3F | 1349.95 |
| **SEKONIC** Distributed by Mamiya | |
| L208 Twin Mate | 99.95 |
| L308S Flashmate (3-Year Warranty!) | 189.00 |
| L398A Studio III (3-Year Warranty!) | 179.00 |
| L358 Flash Master (3-Year Warranty!) | 259.00 |
| L758R DR Digital Flashmaster | 499.00 |
| L758C Cine | 669.00 |
| C500 Prodigi Color | 999.00 |
| C500 Prodigi with Module | 1099.00 |

# SLR Lenses & Flashes

## Vivitar
### DF120 Digital Slave Flash

- Acts as a Slave to all Digital Cameras that have a Built-In Flash
- Guide No. 40
- Bounce Head
- Swivel Head
- 5 second Recycle Time
- Includes Bracket & Multi-Angle Stand
- Weight 1.6 oz

## QUANTUM
### Q-Flash T5-DR Digital Flash

- Parabolic Reflector Flash
- Bounce & Swivel Head
- Wireless TTL, Sync and Shutter Control
- Program Mode
- Exposure Confirmation
- Up to 150 w/s, Full Power, Manual

## Digi-Slave
### L-Ring LED Ringlight

- Works with any digital or film camera
- Recommended for cameras with smaller lenses
- 16 high power white LEDs
- 52mm threads
- Variable power dial
- Powered by 9V battery

## Vivitar
### Shoe Mount Flashes

| | |
|---|---|
| DF120 Digital Slave | 29.95 |
| 728 AF for Maxxum | 29.95 |
| 730 AF for Maxxum | 29.95 |
| 285 HV Manual | 89.95 |
| **Accessories** | |
| VP-1 Vari Power Adapter f/283 | 19.95 |
| SB-4 AC Adapter f/283, 285 | 19.95 |
| F3 Flash Adapter | 17.95 |

## QUANTUM
### Quantum Q-flash T5D-R Kits

| | |
|---|---|
| with Turbo Battery | 1081.95 |
| with Turbo Compact Battery | 1096.95 |
| with Turbo 2x2 Battery | 1242.95 |
| **Quantum Batteries** | |
| Battery 1 Compact | 197.00 |
| Battery 1 | 214.00 |
| Battery 2 | 258.00 |
| Turbo Battery | 408.00 |
| Turbo Compact with Charger | 423.00 |

## STO-FEN
### OMNI-BOUNCE

*The Omni-Bounce creates a diffused bare bulb effect, giving even coverage across the entire frame, with lenses from 15mm to 200mm in the 35mm format* **$16.95**

| | |
|---|---|
| OM-422 | Sunpak Shoe Mount Flash |
| OM-522 | Sunpak Handle Flash |
| OM-B | Vivitar 283, 285, Canon 420, 430EZ |
| OM-CT45 | Metz CT45, CL45 |
| OM-CT60 | Metz CT60, CL60 |
| OM-MZ70 | Metz 70MZ-4, 70MZ-5 |
| OM-PZ4 | Sunpak 4000, Metz 40AF-4N |
| OM-SB16 | Nikon SB16 |
| OM-SB5 | Nikon SB-50, 800X |
| OM-600 | Nikon SB-600 |
| OM-EX | Canon 420EX |
| OM-EW | Canon 430EX |
| OM-EY | Canon 580EX |
| OM-EZ | Canon 540EZ |
| OM-MZ6 | Minolta 5600HS |
| OM-UNI | Universal |

## Digi-Slave for Digital Cameras
### Shoe Mount Slave Flashes

| | |
|---|---|
| Deluxe 3000 #DID3000 | $129.95 |
| **Ringlight Flashes** | |
| Flex-Ring 6400 Macro LED + Twin Light #FLR6400 | 369.95 |
| L-Ring LED #L520 | $119.95 |
| Mini L-Ring Ultra #U5200 | $149.95 |
| L-Ring Ultra II #LRU255 | $249.95 |
| with Diffuser #LRU255D | $249.95 |
| L-Ring 3200 #LRU3200 | $289.95 |
| with Diffuser #LRU3200D | $289.95 |

## SIGMA
### EF-530 DG ST Flash

- TTL auto flash exposure control
- Bounce & Swivel Head
- Guide Number 165

Available for Canon, Sony/Minolta, Nikon, Pentax & Sigma

#SIEF530ST* **$169.00**

### EF-530 DG Super Flash

- Bounce & Swivel Head
- Modeling Light
- Strobe Effect Features enable reduced power settings

Available for Canon, Sony/Minolta, Nikon, Pentax & Sigma

#SIEF530* **$239.00**

### EM-140 DG TTL Ringlight

- Wireless TTL flash control
- EM-140 DG Fully dedicated with Canon E-TTL II or Nikon I-TTL/D-TTL

Available for Canon, Nikon & Sigma

#SIEM140DG* **$399.95**

## SIGMA
### 70-200mm f/2.8 II EX APO Macro HSM AF DG Lens

- *Desirable for Digital SLR Cameras*
- Minimum focus 3.3'
- Magnification ratio of 1:3.5
- 34-12.3° angle of view
- 77mm filter diameter
- Tripod collar
- Weight 48 oz

## SIGMA
### 18-200mm f/3.5-6.3 IF Asph. DC Lens

- *Exclusively designed for use with digital SLR cameras*
- Focus 17.7" to Infinity
- Magnification ratio of 1:4.4
- 69.3°-7.1° angle of view
- 62mm filter diameter
- Weight 14.4 oz

## SIGMA
### 18-50mm f/2.8 EX Macro DC Super Wide Angle Lens

- *Exclusively designed for use with digital SLR cameras*
- Minimum focus 7.9"
- Magnification ratio 1:3
- 69.3-7.1° angle of view
- Super Multi Layer (SML)
- 72mm filter diameter
- Weight 15.9 oz

# SIGMA

Perfecting The Way Photographers Work
**PRO LENSES, CAMERAS & FLASHES**
**All Sigma Cameras, Lenses & Flashes Are Made Exclusively In Japan.**

**DC Models –** for Digital SLRs Only **DG Models –** Optimized for Digital SLRs

| ^ "D"Type | Canon EOS | Nikon AF | Sony/ Minolta | Olympus 4/3 Sys. | Pentax AF | Sigma AF |
|---|---|---|---|---|---|---|
| DC 4.5mm f/2.8 EX Circular Fisheye **HSM** ** | 899.00 | 899.00 | — | — | — | 899.00 |
| DG 8/3.5 EX Circular Fish-Eye ** | 759.00 | 759.00^ | 759.00 | — | 759.00 | 759.00 |
| DC 10mm f/2.8 EX Fisheye **HSM** ** | 649.00 | 649.00 | — | — | — | 649.00 |
| DG 15/2.8 EX Diagonal Fish-Eye ** | 609.00 | 609.00^ | 609.00 | — | 609.00 | 609.00 |
| DG 20/1.8 EX DF RF Aspherical (82ø) | 459.00 | 459.00^ | 459.00^ | — | 459.00 | 459.00 |
| DG 24/1.8 EX DF Aspherical Macro (77ø) | 389.00 | 389.00^ | 389.00^ | 389.00 | 389.00 | 389.00 |
| DG 28/1.8 EX DF Aspherical Macro (77ø) | 299.00 | 299.00^ | 299.00^ | — | 299.00 | 299.00 |
| DC 30mm f/1.4 EX **HSM** (62ø) | 439.00 | 439.00^ | 439.00 | 439.00 | 439.00 | 439.00 |
| DG 50mm f/1.4 EX (77ø) | 499.00* | 499.00* | 499.00 | 499.00 | 499.00 | 499.00* |
| DG 50/2.8 EX Macro (55ø) | 279.00 | 279.00^ | 279.00 | — | 279.00 | 279.00 |
| DG 70/2.8 EX Macro (62ø) | 479.00 | 479.00^ | 479.00 | — | 479.00 | 479.00 |
| DG 105/2.8 EX Macro (58ø) | 439.00 | 439.00^ | 439.00 | 439.00 | 439.00 | 439.00 |
| DG 150/2.8 EX APO Macro **HSM** (72ø) | 669.00 | 669.00^ | — | 669.00 | — | 669.00 |
| DG 180/3.5 EX APO IF Macro **HSM** (72ø) | 899.00 | 899.00^ | 899.00 | — | 899.00 | 899.00 |
| DG 300/2.8 APO EX **HSM** | 2,999.00 | 2,999.00^ | 2,999.00 | — | 2,999.00 | 2,999.00 |
| DG 500/4.5 APO EX **HSM** | 4,699.00 | 4,699.00^ | 4,699.00 | — | 4,699.00 | 4,699.00 |
| DG 800/5.6 APO EX **HSM** | 7,399.00 | 7,399.00^ | 7,399.00 | — | 7,399.00 | 7,399.00 |
| DC 10-20/4-5.6 EX **HSM** (77ø) | 479.00 | 479.00^ | 479.00 | 479.00 | 479.00 | 479.00 |
| DG 12-24/4.5-5.6 EX ** | 779.00* | 779.00^* | 779.00^ | — | 779.00 | 779.00* |
| DC 17-70/2.8-4.5 Macro (72ø) | 369.00 | — | 369.00 | — | 369.00 | 369.00 |
| DC 17-70/2.8-4.5 **HSM** (72ø) | — | 369.00 | — | — | — | — |
| DC 18-50/3.5-5.6 (58ø) | 139.00 | — | 139.00 | 139.00 | 139.00 | 139.00 |
| DC 18-50/3.5-5.6 **HSM** (58ø) | — | 139.00 | — | — | — | — |
| DC 18-50/2.8 EX Macro (72ø) | 419.00 | 419.00^ | 419.00 | 419.00 | 419.00 | 419.00 |
| DC 18-50/2.8 EX Macro **HSM** (72ø) | — | 419.00 | — | — | — | — |
| DC 18-125/3.8-5.6 **OS** (Optical Stabilizer) (67ø) | 339.00* | 339.00* | 339.00 | — | 339.00 | 339.00* |
| DC 18-200/3.5-6.3 **OS** (Optical Stabilizer) (72ø) | 439.00 | 439.00 | — | — | — | 439.00 |
| DC 18-200/3.5-6.3 IF Aspherical (62ø) | 319.00 | 319.00^ | 319.00 | — | 319.00 | 319.00 |
| DG 24-70/2.8 EX Aspherical (82ø) | 499.00 | 499.00^ | 499.00^ | — | 499.00 | 499.00 |
| DG 28-70/2.8-4.0 EX (58ø) | 149.00 | 149.00^ | 149.00 | — | 149.00 | 149.00 |
| DG 28-70/2.8 EX (67ø) | 379.00 | 379.00^ | 379.00^ | — | 379.00 | 379.00 |
| DG 28-300/3.5-6.3 Macro (62ø) | 299.00 | 299.00^ | 299.00^ | — | 299.00 | 299.00 |
| DC 50-150/2.8 EX **HSM** II (67ø) | 749.00* | 749.00^ | — | — | — | 749.00 |
| DG 50-500/4-6.3 EX APO RF (86Cø) | 1,159.00* | 1,159.00^* | 1,159.00 | 1,159.00 | 1,159.00 | 1,159.00* |
| DC 55-200/4-5.6 (55ø) | 149.00 | 149.00^ | 149.00 | 149.00 | 149.00 | 149.00 |
| DG 70-200/2.8 EX Macro II **HSM** (77ø) | 799.00 | 799.00^ | 799.00 | 799.00 | 799.00 | 799.00 |
| DG 70-300/4-5.6 DL Macro Super II (58ø) | 149.00 | 149.00^ | 149.00 | — | 149.00 | 149.00 |
| DG 70-300/4-5.6 APO Macro Super II (58ø) | 209.00 | 209.00^ | 209.00 | — | 209.00 | 209.00 |
| DG 100-300/4 EX IF APO (82ø) | 1,199.00* | 1,199.00^* | 1,199.00 | — | 1,199.00 | 1,199.00* |
| DG 120-300/2.8 EX APO IF **HSM** (105ø) | 2,999.00 | 2999.00^ | — | — | — | 2,999.00 |
| DG 120-400/4.5-5.6 APO **OS HSM** (77ø Rear) | 849.00 | 849.00 | — | — | — | 849.00 |
| DG 150-500/5-6.3 APO **OS HSM** | 979.00 | 979.00 | — | — | — | 979.00 |
| DG 200-500/2.8/400-1000/5.6 APO EX (72ø Rear) | 24,499.00 | 24,499.00 | — | — | — | 24,499.00 |
| DG 300-800/5.6 APO EX **HSM** | 7,999.00 | 7,999.00^ | — | 7,999.00 | — | 7,999.00 |
| DG 1.4x EX APO Tele-Converter | 219.00 | 219.00^ | 219.00 | — | 219.00 | 219.00 |
| DG 2x EX APO Tele-Converter | 239.00 | 239.00^ | 239.00 | — | 239.00 | 239.00 |

* **HSM** Model
** Rear Slip-in Gelatin Filter Slot

## LensCoat LENS COVERS

*Moving a big white (or black) lens near skittish wildlife is like waving your arms – a sure way to flush your subject and ruin what could be a once-in-a-lifetime photo opportunity. LensCoat™ Lens Covers mask your large lens, giving you a better chance at getting the shot.*

*Manufactured from 100% closed-cell neoprene, offering protection from bumps, jars and nicks, with a camouflage-pattern fabric cover. Lens Covers also provide a thermal barrier, protecting your hands from cold lenses in lower temperatures. They are easy to install and remove, leaving no residue on the lens. And LensCoat™ lens covers are waterproof, providing protection in harsh conditions.*

***Available for a wide variety of lenses.***

Colors: Black, White, Forest Green Camo, Realtree Max4 HD, and Realtree Hardwoods Snow


B&H PHOTO - VIDEO - PRO AUDIO

The Professional's Source

**B&H Phones**

**800-947-9980**

**212-444-6666**

*Fax:*

**212-239-7770**

*To Inquire About Your Order Call:*

**800-221-5743**

**212-239-7765**

*or Fax:*

**866-521-7375**

**212-502-9426**

**B&H Store**

**420 Ninth Ave.**

*Corner of 34th Street*

**New York, N.Y. 10001**

*Store & Mail Order Hours:*

**Sunday 10-5**
**Mon.-Thurs. 9-7**
**Friday 9-1**
**Saturday Closed**

Most orders shipped within 24 hours

Overnight service available

All items are complete with all accessories as supplied by manufacturer.

Used equipment bought, sold and traded

Equipment leasing available

## Metz 48 AF-1 TTL Shoe Mount Digital Flash

- Fully compatible with current and future digital cameras
- Guide No. 158 @ 105mm • Automatic & wireless TTL control
- Bounce & Swivel Head
- Zoom Head (24-105mm) flash senses focal length & adjusts

## Metz 54 MZ-4 TTL Shoe Mount Flash

- Guide No. 177
- "Cobra Design" flash reduces redeye effect
- Bounce & Swivel Head
- Zoom Head (24-105mm)
- Wireless full TTL triggering
- Available for Olympus, Nikon, Minolta, Pentax
- Weight 16 oz

## SUNPAK PF-30x AF TTL Shoe Mount Flash

- Guide No. 98.5
- AF Assist Light
- Bounce Head (up to 90° tilt)
- Fully compatible with Nikon i-TTL, Canon E-TTL
- Weight 7.7 oz

## SUNPAK PZ-40x II AF TTL Shoe Mount Flash

- Guide No. 133
- AF Assist Light
- Automatic Shutdown Mode • Large Illuminated LCD panel
- Fully compatible with Nikon i-TTL, Canon E-TTL, Minolta ADI
- Weight 7.2 oz

### LumiQuest

| | |
|---|---|
| Pocket Bouncer | 19.95 |
| Ultrasoft Pocket Bouncer | 27.95 |
| Pro Max System | 47.95 |
| Pro Max Mini Softbox | 25.95 |
| Pro Max Softbox | 39.95 |
| Softbox 2 | 30.95 |
| Snoot | 27.95 |

### Custom Brackets

Rotation & Bracket Systems

| | |
|---|---|
| CB Junior | 89.95 |
| CB Junior Kit | 109.95 |
| Digital Pro E Kit | 249.95 |
| Digital Pro SV Kit | 259.95 |
| Digital Pro M Kit | 379.95 |
| QRS for Medium Format | 174.95 |

### Stroboframe Brackets

| | |
|---|---|
| Quick Flip 350 | 49.95 |
| Quick Flip 120 | 69.95 |
| Folding Flip | 89.95 |
| "Camera Flip" | 79.95 |
| Press-T | 104.95 |
| Pro-66 | 119.95 |
| Pro-RL | 154.95 |
| Pro-SQ | 129.95 |
| Pro-T | 99.95 |
| RL-2000 | 144.95 |
| Vertaflip PHD Professional/Heavy-Duty | 59.95 |
| VH-2000 Stroboflip | 89.95 |

Accessories

| | |
|---|---|
| Camera Anti-Twist Plates | 12.95 |
| 300QRC Quick Release Set | 64.95 |

### Metz Shoe Mount Flashes

| | |
|---|---|
| 20 C-2 Manual/Auto | 59.95 |
| 28 AF-3 TTL Digital | 149.95 |
| 28 SC-2 Digital Slave Flash | 149.95 |
| 36 AF-4C TTL | 139.95 |
| 44 MZ-2 Manual/Auto | 329.95 |
| 54 MZ-4 TTL Standard | 399.95 |
| 48 AF-1 for Canon Digital | 224.95 |
| 48 AF-1 for Nikon Digital | 214.95 |
| 58 AF-1 TTL for Canon Digital | 399.95 |
| 58 AF-1 TTL for Nikon Digital | 359.95 |

Handle Mount Flash Systems with Battery & Charger

| | |
|---|---|
| 45 CL-4 TTL Digital | 674.95 |
| 76 MZ-5 TTL Digital | 999.95 |

### SUNPAK

| | |
|---|---|
| E-Flash Flat Panel Kit #MCEFKIT | 74.95* |

*Requires Module

Shoe Mount AF Flashes

| | |
|---|---|
| Digital Flash #018ST Fits most Digital Cameras | 29.95 |
| 433 AF TTL | 89.95 |
| PZ-4000 AF TTL | 109.95 |
| PF-30x TTL for Nikon, Canon | 99.95 |
| PZ-40x II TTL Black or Silver | 149.95 |
| PZ-42x TTL for Nikon, Canon | 149.95 |

Handle Mount Flashes

| | |
|---|---|
| 622 Super Pro TTL | 199.95 |
| 622 Super Pro TTL w/Zoom Head | 249.95 |

Ringlight Flashes

| | |
|---|---|
| D-Macro for Digital #0813 | 269.95 |

## LENSBABY™ COMPOSER™

*Selective Focus SLR Camera Lens!*

- Great for a methodical and step-by-step shooting style
- Features a unique barrel focusing ring that becomes more sensitive (requiring greater rotation to move the optic in and out) as you approach infinity, making it easier to focus on subjects from 10 feet to infinity
- Focal Length: 50mm • Focus Type: Manual
- Aperture: Interchangeable levitating aperture disks
- Apertures: f/2, f/2.8, f/4, f/5.6, f/8, f/11, f/16, f/22
- Minimum Focus: about 18" • Weight: 5.5 oz

© Mark Cornelison

for Canon, Nikon, Olympus, Pentax, Sony/Minolta Digital SLRs

#LELC* **$269.95**

## norman 400ws Portable Battery Assembly Kit

- Basic UV Coiled Cord Lamp Head, Radio Slave
- 5" Standard Reflector
- NO400B Power Pack
- 2 NiCad Battery for P400B
- Super Dual Charger with Cable
- Contour Shoulder Strap

#NO400BRK **$1,383.95**

Same kit with Pocket Wizard Radio Slave #NO400BRMK **$1,476.95**

## PHOENIX

| | Manual Focus | Minolta Maxxum | Canon EOS | Nikon AF | Pentax AF |
|---|---|---|---|---|---|
| 100/3.5 Macro (49ø) | 119.95 | — | — | — | — |
| 500/8 Mirror Manual w/Mount (30.5øR) | 109.95 | 109.95 | 109.95 | 109.95 | 109.95 |
| 19-35/3.5-4.5 (77ø) | 159.95 | 159.95 | 169.95 | 159.95 | 159.95 |
| 28-80/3.5-5.6 (58ø) | 89.95 | 69.95 | 79.95 | 69.95 | 69.95 |
| 28-105/2.8-3.8 (72ø) | — | 169.95 | — | — | — |
| 28-210/3.5-5.6 (72ø) | 144.95 | 149.95 | 164.95 | — | — |
| 28-210/4.2-6.5 AS IF (72ø) | — | 179.95 | — | 179.95 | 179.95 |
| 70-210/4.5-5.6 (55ø) | 89.95 | 99.95 | 119.95 | 99.95 | — |
| 100-300/5.6-6.7 (55ø) | 109.95 | 114.95 | 129.95 | 114.95 | 114.95 |
| 650-1300/8.0-16.0 (Specify T-Mount) | 299.95 | 299.95 | 299.95 | 299.95 | 299.95 |

## Tokina 11-16mm f/2.8 AT-X Pro DX Ultra Wide Angle AF Lens

- *Exclusively designed for Digital SLRs*
- WR (Water Repellent) coating
- Minimum Focus 1'
- Magnification ratio 1:11.6
- 104-82° angle of view
- 77mm filter diameter
- Weight 19.2 oz

## Sunex 5.6mm f/5.6 SuperFisheye Fixed Focus Lens

- Super-wide fisheye lens covers 185°
- Create a full spherical image from just 2 shots
- For digital SLR cameras using APS-C format imagers

f/Canon #SU5656C **$799.95**
f/Nikon #SU5656N **$799.95**

## TAMRON 17-50mm f/2.8 XR LD-IF Di II Digital Lens

- *Exclusively designed for use with digital SLR cameras*
- Focus 10.6" to Infinity
- Magnification ratio of 1:4.5
- 78°-31° Angle of View
- 67mm filter diameter
- Weight 15.2 oz

## TAMRON 28-300mm f/3.5-6.3 XR VC LD Aspherical IF Macro Di AF Lens

- *Desirable for Digital SLR Cameras*
- "VC" Vibration Compensation
- Minimum Focus 1.6'
- Magnification ratio 1:3
- 75-8° angle of view
- 67mm filter diameter
- Weight 19.2 oz

## Tokina

DX – Designed for Digital SLR cameras only

| AF Lenses | Canon | Nikon |
|---|---|---|
| DX 35/2.8 Pro Macro (52ø) | 459.95 | 459.95 |
| 100/2.8 Pro D (55ø) | 399.95 | 399.95 |
| DX 10-17/3.5-4.5 ATX Fisheye | 559.95 | 559.95 |
| DX 11-16/2.8 Pro (77ø) | 569.95 | 569.95 |
| DX 12-24/4.0 Pro (77ø) | 499.95 | 499.95 |
| DX 16-50/2.8 Pro (77ø) | 659.95 | 659.95 |
| DX 50-135/2.8 (67ø) | 699.95 | 699.95 |
| 80-400/4.5-5.6 ATX D (72ø) | 649.95 | 649.95 |

## TAMRON 6 YEAR WARRANTY

**Di** – Designed for use on both digital & film SLR cameras
**Di-II** – Designed for Digital SLR cameras only

### TAMRON REBATES EXTENDED!

| AF Lenses | Reg. Price | Less Rebate | Final Cost |
|---|---|---|---|
| 90/2.8 Di Macro | 489.00 | $90 | 399.00 |
| 180/3.5 LD IF Di Macro | 699.00 | $50 | 649.00 |
| 11-18/4.5-5.6 Di-II | 569.00 | $75 | 494.00 |
| 17-35/2.8-4 Di | 299.00 | $10 | 289.00 |
| 18-200/3.5-6.3 Di-II | 279.00 | $30 | 249.00 |
| 28-200/3.8-5.6 Di | 299.00 | $50 | 249.00 |
| 28-300/3.5-6.3 Di | 399.00 | $50 | 349.00 |
| 28-75/2.8 XR Di | 399.00 | $10 | 389.00 |
| 55-200/4-5.6 Di-II | 189.00 | $40 | 149.00 |
| 200-500/5-6.3 Di | 879.00 | $30 | 849.00 |

| AF Lesnses * Price After Rebate (Expires 12-31-08) | Canon EOS | Nikon AF | Sony/ Minolta | Pentax AF |
|---|---|---|---|---|
| 14/2.8 AF | 1,099.00 | 1,099.00 | — | — |
| Di 90/2.8 Macro (55ø) | 399.00* | 399.00* | 399.00* | 399.00* |
| Di 180/3.5 LD IF Macro (72ø) | 649.00* | 649.00* | 649.00* | — |
| Di-II 11-18/4.5-5.6 (77ø) | 494.00* | 494.00* | 494.00* | — |
| Di 17-35/2.8-4 LD IF Aspherical (77ø) | 289.00* | 289.00* | — | — |
| Di-II 17-50/2.8 XR LD IF Aspherical (67ø) | 449.00 | 449.00 | 449.00 | — |
| Di-II 18-200/3.5-6.3 (62ø) | 249.00* | 249.00* | 249.00* | 249.00* |
| Di-II 18-250/3.5-6.3 (62ø) | 499.00 | 499.00 | 499.00 | 499.00 |
| Di-II 18-270/3.5-6.3 VC | 599.00 | 599.00 | — | — |
| Di 28-75/2.8 XR (67ø) | 389.00* | 389.00* | 389.00* | 389.00* |
| 28-80/3.5-5.6 (58ø) | 79.00 | 79.00 | 79.00 | 79.00 |
| Di 28-200/3.8-5.6 Aspherical XR IF Macro (62ø) | 249.00* | 249.00* | 249.00* | 249.00* |
| Di 28-300/3.5-6.3 XR (62ø) | 349.00* | 349.00* | 349.00* | 349.00* |
| Di 28-300/3.5-6.3 XR VC (62ø) | 599.00 | 599.00 | — | — |
| Di-II 55-200/4-5.6 LD Macro (52ø) | 149.00* | 149.00* | 149.00* | — |
| Di 70-200/2.8 LD IF Macro (77ø) | 699.00 | 699.00 | 699.00 | 699.00 |
| Di 70-300/4.0-5.6 LD Macro (62ø) | 189.00 | 189.00 | 189.00 | 189.00 |
| 75-300/4.0-5.6 LD (62ø) | 149.00 | 149.00 | 149.00 | 149.00 |
| Di 200-500/5-6.3 LD IF (86Cø) | 849.00* | 849.00* | 849.00* | — |
| SP 1.4x AF Pro Converter | 189.00 | 189.00 | — | — |
| SP 2x AF Pro Converter | 219.00 | 219.00 | — | — |

B&H PHOTO - VIDEO - PRO AUDIO

The Professional's Source

B&H Online

bhphotovideo.com

- Support, before and after sale
- Online live support
- Massive online presence
- Huge inventory available for worldwide shipping
- Educate yourself in our product resource center

One hour free parking at 349 west 34th st.

For a free catalog, call 800-947-6933, 212-444-6633, write or go online.

Seven day customer satisfaction guarantee!

Corporate accounts welcome

B&H
PHOTO - VIDEO - PRO AUDIO

The Professional's Source

## B&H Phones

**800-947-9980**

**212-444-6666**

*Fax:*
**212-239-7770**
*To Inquire About Your Order Call:*
**800-221-5743**
**212-239-7765**
*or Fax:*
**866-521-7375**
**212-502-9426**

## B&H Store

**420 Ninth Ave.**
*Corner of 34th Street*
**New York, N.Y. 10001**

*Store & Mail Order Hours:*
**Sunday 10-5**
**Mon.-Thurs. 9-7**
**Friday 9-1**
**Saturday Closed**

Most orders shipped within 24 hours

Overnight service available

All items are complete with all accessories as supplied by manufacturer.

Used equipment bought, sold and traded

Equipment leasing available

### EX-F1

- 60 shots per second High Speed Burst mode
- 1,200 frames per second High Speed Video
- Slow Motion Video (300-600 frames per second)
- 1080i HD Video
- 6 Megapixel
- 12x optical zoom

### EX-FH20

- 40 shots per second High Speed Burst mode
- 1,000 frames per second High Speed Video
- Slow Motion Video (300-600 frames per second)
- 720p HD Video
- 9.1 Megapixel
- 20x optical zoom

With the Casio Exilim High Speed Cameras you can capture high resolution images at blistering speeds providing more images to choose from than with a DSLR. What makes these cameras truly unique is that with the push of a button you can shoot high definition video and switch to high speed, slow motion video. Use the high speed video function to capture movement that you cannot see with the naked eye.

For additional information on Casio's Exilim High Speed Cameras, visit www.CasioHighSpeed.com.

HIGH SPEED EXILIM

## COLOR PRINT FILM

### Kodak

| | Gold – GA 100 IMP | Gold – GB 200 IMP | Max – GC 400 IMP |
|---|---|---|---|
| 135-24 | 2.19 | 2.49 | 2.89 |
| 135-36 | — | 3.19 | 2.99 |

| | Portra 160NC | Portra 160VC | Portra 400NC | Portra 400VC | Ultra Prof. 800 | Ultra Prof. 100UC | Ultra Prof. 400UC |
|---|---|---|---|---|---|---|---|
| 135-36 | 5.49 | 5.49 | 5.99 | 5.99 | 6.25 | 4.95 | 4.95 |
| 120 Roll | 4.15 | 4.15 | 4.30 | 4.30 | 5.09 | — | — |
| 220 PP (5) | 39.95 | — | 42.95 | 42.95 | — | — | — |

IMP imported from Europe

USA Manufactured in USA for Domestic Distribution

### FUJIFILM

| | Reala CS 100 | Superia CN 100 | Superia CA 200 | Superia CH 400 | Superia CZ 800 | Press CZ 800 |
|---|---|---|---|---|---|---|
| 135-24 | — | 1.99 | 1.99 | 1.99 | 3.99 | — |
| 135-36 | 4.95 | 1.99 | 1.99 | 1.99 | — | 3.39 |

| | Pro 160C | Pro 160S | Pro 400H | Pro 800Z |
|---|---|---|---|---|
| 135-36 | 5.95 | 5.70 | 6.15 | 6.39 |
| 120 Roll | 3.79 | 3.70 | 3.95 | 4.59 |
| 220 PP (5) | 7.70 | 7.70 | 7.99 | 8.39 |

### PROCESSING MAILERS

Fuji Slide 36 Exp. (35mm)..... 4.99

Agfa Scala Slide (35mm/120) 36 Exp. Mounted..... 10.00

AEI Processing

| | 35mm | 120 | 220 |
|---|---|---|---|
| Slide E6 | 9.49 | 9.49 | 18.95 |
| Print C41 | 13.49 | 15.49 | 30.95 |

## COLOR SLIDE FILM

### Kodak

| | Kodachrome KR 64 USA | EPY 64 Tungsten | Ektachrome Professional E Series 100 VS | E Series 100 G | E Series 100 GX | EPP 100 |
|---|---|---|---|---|---|---|
| 135-36 | 8.50 | 11.99 | 7.50 | 7.50 | 7.50 | 12.95 |
| 120 Roll | — | 6.95 | 5.50 | 5.59 | 5.79 | 6.99 |
| 220 PP (5) | — | — | 51.95 | — | — | — |

### FUJIFILM

| | Fujichrome Sensia RA 100 | Fujichrome Sensia RM 200 | Fujichrome Sensia RH 400 | Fujichrome Professional Velvia RVP Pro 50 | Velvia RVP 100 | Astia RAP100F | Provia RDP100F | Provia RXP III 400X | Tungsten RTP T64 |
|---|---|---|---|---|---|---|---|---|---|
| 135-36 | 5.49 | 6.95 | 8.99 | 6.89 | 6.25 | 5.80 | 5.99 | 9.95 | 8.95 |
| 120 Roll | — | — | — | 4.99 | 4.59 | 4.59 | 3.89 | 5.99 | 4.95 |
| 220 PP (5) | — | — | — | 9.99 | 8.99 | 8.39 | 8.39 | — | — |

## COLOR SLIDE FILM

### Kodak

| | Plus-X 125 | Tri-X 400 | TMX 100 | TMY 400 | TMZ 3200 | BW 400 CN |
|---|---|---|---|---|---|---|
| 135-36 | 5.95 | 3.95 | 5.50 | 5.50 | 7.50 | 5.50 |
| 120 Roll | — | 3.95 | 3.95 | 3.95 | — | 4.50 |

### ILFORD

| | Pan F+ 50 | FP4+ 125 | HP5+ 400 | Delta Pro 100 | Delta Pro 400 | Delta Pro 3200 | XP-2 Super 400 |
|---|---|---|---|---|---|---|---|
| 135-36 | 5.50 | 5.50 | 3.95 | 5.50 | 5.50 | 6.50 | 5.50 |
| 120 Roll | 3.95 | 3.95 | 3.50 | 3.50 | 3.95 | 4.50 | 3.59 |

### FUJIFILM

| | Infrared SFX 200 | Acros 100 | Neopan 400 | Neopan 1600 |
|---|---|---|---|---|
| 135-36 | 8.95 | 4.50 | 2.99 | 4.50 |
| 120 Roll | 7.95 | 2.95 | 2.95 | — |

### AGFA

| | SLIDE Scala 200 |
|---|---|
| 135-36 | 12.95 |
| 120 Roll | — |

## Bags & Cases

Quick Dial 73

### DPS 3N1 Sling/ Backpacks

3N1 bags provides fast equipment access and ultimate freedom, allowing three carrying options in one while morphing from sling to backpack and back again fast and easy.

| | 10 Small | 20 Med. | 30 Large |
|---|---|---|---|
| SKU # | #KA31SBS | #KA31SBM | #KA31SBL |
| Color | Black | | |
| HOLDS SLRs | 1 | 1 | 1 |
| HOLDS Lens/Flash | 2 | 4 | 6 |
| HOLDS Acc. | Yes | Yes | Yes |
| Price | $79.95 | $99.95 | $124.95 |

### Lowepro Fastpack Backpacks

Protects your equipment and provide storage for accessories. Side-entry compartments let you quickly access gear & accessories, even while you're on the move.

| | 200 | 250 | 350 |
|---|---|---|---|
| SKU # | #LOFP200* | #LOFP250* | #LOFP350* |
| Color | Black, Blue, Red | | |
| HOLDS SLRs | 1 | 1 | 1 |
| HOLDS Lens/Flash | 3 | 4 | 4 |
| HOLDS Laptop | No | 15.4" | 17.4" |
| Price | $74.95 | $89.95 | $112.95 |

### TENBA Shootout Shoulder Bags

SHOOTOUT™ is designed from the ground up for serious outdoor imaging. Light on your shoulders but heavy on protection, access and features.

| | Small | Medium | Large |
|---|---|---|---|
| SKU # | #TESSS* | #TESSM* | #TESSL* |
| Color | Black, Black/Olive, Silver/Black | | |
| HOLDS SLRs | 1 | 1 | 2 |
| HOLDS Lens/Flash | 3 | 4 | 7 |
| HOLDS Acc. | No | No | Yes - 15" |
| Price | $98.95 | $119.95 | $159.95 |

### tamrac Aero Backpacks

Speed Pack's Dual Entry System allows camera access via side door or front panel. Weatherproof exterior and foam padded interior compartments for a custom equipment fit.

| | Speed Pack 75 3375 | Speed Pack 85 3385 |
|---|---|---|
| SKU # | #TA3375* | #TA3385* |
| Color | Black, Rust | |
| HOLDS SLRs | 1 | 1 |
| HOLDS Lens/Flash | 3 | 4 |
| HOLDS Laptop | No | 17" |
| Price | $89.95 | $119.95 |

## Tripods

Quick Dial 73

### Manfrotto bogen 190X Series

Improved castings for reduced weight without compromising strength and stability. XB features low angle adapter, XProB features vertical/horizontal quick flip center column.

| | 190XDB | 190XB | 190XPROB |
|---|---|---|---|
| SKU # | #B0190XDB | #B0190XB | #B0190XPROB |
| Head | Requires Head (head sold seperately) | | |
| Load Capacity | 11 lbs | 11 lbs | 11 lbs |
| Max. Height | 57.5" | 57.1" | 57.5" |
| Leg Sections | 3 | 3 | 3 |
| Folded Length | 21" | 20.9" | 22.4" |
| Weight | 3.5 lbs | 4 lbs | 4 lbs |
| Price | $98.95 | $129.95 | $159.95 |

### Manfrotto bogen 055X Series

Similar in design and features to the 190X series but with increased operating height and max load capacity. 055XB features low angle adapter, 055XproB features vertical/horizontal quick flip center column.

| | 055XDB | 055XB | 055XPROB |
|---|---|---|---|
| SKU # | #B0055XDB | #B0055XB | #B0055XPROB |
| Head | Requires Head (head sold seperately) | | |
| Load Capacity | 15.4 lbs | 15.4 lbs | 15.4 lbs |
| Max. Height | 70" | 70" | 70.3" |
| Leg Sections | 3 | 3 | 3 |
| Folded Length | 24" | 24" | 25.7" |
| Weight | 4.6 lbs | 5 lbs | 5.3 lbs |
| Price | $134.95 | $159.95 | $174.95 |

### BENRO Carbon Fiber "C" Series

Benro C-Series carbon fiber is lighter without compromising strength, rigidity, and performance. 2nd-Generation 8-layer carbon fiber tube technology is 40% stronger yet 15% lighter.

| | C158n6 | C258n6 | C358n6 |
|---|---|---|---|
| SKU # | #BEC158N6 | #BEC258N6 | #BEC358N6 |
| Head | Requires Head (head sold seperately) | | |
| Load Capacity | 11 lbs | 17.6 lbs | 22 lbs |
| Max. Height | 58.5" | 60.2" | 68.1" |
| Leg Sections | 4 | 4 | 4 |
| Folded Length | 19.3" | 20.9" | 24" |
| Weight | 3 lbs | 3.6 lbs | 5 lbs |
| Price | $239.95 | $268.95 | $384.95 |

### GITZO Explorer Series

Six Layer, pultrusion (spun), 100% carbon fiber tubes, "G Lock" leg locks. Legs and center column. Can be locked at a wide range of angles making it the perfect wilderness field tripod. Also available in Aluminum & Basalt.

| | GT2932EX | GT2330EX | GT2531EX |
|---|---|---|---|
| SKU # | #GGT2932EX | #GGT2330EX | #GGT2531EX |
| Head | Requires Head (head sold seperately) | | |
| Load Capacity | 22 lbs | 19.8 lbs | 26.4 lbs |
| Max. Height | 59.8" | 63.4" | 66.9" |
| Leg Sections | 3 | 3 | 3 |
| Folded Length | 25.2" | 25.2" | 25.2" |
| Weight | 4.4 lbs | 5.2 lbs | 4.1 lbs |
| Price | $374.95 | $359.95 | $599.95 |


# SLIK THE MOST COPIED LINE OF TRIPOD TODAY

Professional Features, Durable, Affordable.

**PRO 700 DX**
Max Height: 74.8 in.
Max Load: 15.00 lbs.

**PRO 400 DX**
Max Height: 61.0 in.
Max Load: 9.90 lbs.

**PRO 330 DX**
Max Height: 63.0 in.
Max Load: 8.80 lbs.

**PRO 614 CF**
Max Height: 64.5 in.
Max Load: 6.60 lbs.

**SPRINT PRO 3-WAY**
Max Height: 64.9 in.
Max Load: 4.50 lbs.

B&H PHOTO - VIDEO - PRO AUDIO

The Professional's Source

B&H Online

bhphotovideo.com

- Support, before and after sale
- Online live support
- Massive online presence
- Huge inventory available for worldwide shipping
- Educate yourself in our product resource center

One hour free parking at 349 west 34th st.

For a free catalog, call 800-947-6933, 212-444-6633, write or go online.

Seven day customer satisfaction guarantee!

Corporate accounts welcome

By Jillian Kramer

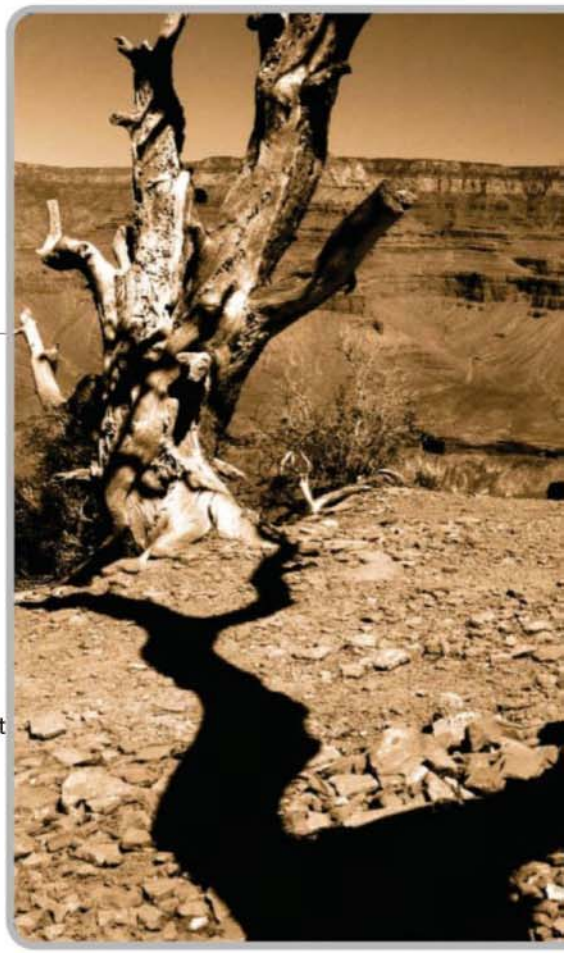
# GET It Free

## Fun and useful photo tools—$0

## Pack up this travel advice

www.travelguidesfree.com

Planning a photo getaway? Don't bother searching all over the internet for ideas. This website lists more than 100 destinations in the U.S. and Canada. All you have to do is pick where you want to go, add the free brochures and travel guides that interest you to your "cart," and they'll be mailed to your home. That's right—by snail mail.



JAMES HANNIBAL/FOTOLIA

### Learn how to use an old camera

www.butkus.org/chinon

If you've uncovered a dusty camera relic—or if you're going through a film phase—visit Orphan Cameras and download instruction manuals for more than 2,500 older-model cameras. The site also provides manuals for flashes, meters, and lenses, and chemical formulas for developing and explaining printing. Old photo catalogs, too.

### Find more filter effects than you need

www.photoshop-filters.com

Sort through hundreds of free Photoshop filters in more than 50 different categories at the Filter Factory. The website compiles and sorts the filters by theme, topic, or creator. Chances are there's a filter for anything you can think of doing to your photos (such as color and texture changes), and a whole lot of things you've never thought of (including effects such as rifle-sight, kaleidoscope, and something called "marble madness").

### Launch your own website

members.freewebs.com

You don't need to know how to write web code or build templates to showcase your photography on the internet. Freewebs lets you choose from more than 300 templates that can hold photo albums, display videos, and even host an online store. And Freewebs partnered with Picnik.com so that you can crop, color, resize, and rotate your photos on your site.

### Enlist for basic training

www.photowalkthrough.com

It's like a personal trainer for your photography. Not only does Photo Walkthrough instruct you on how to use several tools and techniques, explaining the rationale for each, but also walks you through its use in a step-by-step online video.

### Turn your photos into cash

www.dotphoto.com

Promote and sell your pictures—in the form of images, photo packages, and merchandise—online through a free membership with dotPhoto. The site will help you build a profile and market your work with a free membership, and you'll get to keep up to 80 percent of your profits. If you upgrade your membership ($13/month), you'll retain a higher percentage.

### Hire a volunteer business consultant

www.score.org

Starting your own photography business is far from easy. Need help? SCORE is a nonprofit counseling service for small businesses. More than 10,000 volunteer counselors answer questions online 24 hours a day. For general information, check out its podcasts, online workshops, and blogs. Prefer face-to-face interaction? It has 389 offices where you can receive free advice in person.

### Create slideshows without the yawns

www.slideshare.net

Face it—no one likes sitting through a boring slideshow of your vacation photos. Give your family a break, and add some pizzazz (including audio) to your pictures by plugging them into a slideshow at SlideShare. You can embed the slides into blogs and websites, or use them in presentations. You can keep your shows on SlideShare for public display or set it so that only the people you choose can view them.

# THE ULTIMATE IN PHOTO SHOPPING:

# www.adorama.com

**14 Day Money Back GUARANTEE** *check our website for details*

**FREE Shipping**
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

## INK JET PAPER

ProJet elite Fine Art Media

### PREMIUM INKJET PAPER AT ECONOMICAL PRICES

Improve the output of your inkjet printer and the appearance of those treasured memories! Choose a top quality high-grade inkjet paper that will never let you down. Whether you select a Projet paper for everyday use or one of the ProJet Elite papers with over 20 special surfaces, we have a paper that will make you proud of every image you print. Although all your photos will look like a million, only you will know how much you saved!

**Some of our popular surfaces include:**

- Double Sided Matte
- Double Sided Card Stock
- Photo Gloss
- Double Sided Semi Gloss
- Double Sided Semi Gloss HW
- Smooth Silk
- Picture Rag Coolton
- Picture Rag Warmton
- 190 Gram and 300 Gram

| | GREAT FOR: |
|---|---|
| • Royal Satin | *Portraits* |
| • Linen Texture | *Portraits & Fashion* |
| • Velvet Smooth | *Fine Art* |
| Silver Mirror | *Metallic Shots* |

**SIZES FROM:**
4x6" up to 17x22"
Sheets and in Rolls

***For a complete listing & prices***
**WWW.ADORAMA.COM**

---

**ORIENTAL**

SIZES FROM:
• 8.5X11 UP TO 13X19
Most Popular Rolls

**Premier photo**

SIZES FROM:
• 4X6 UP TO 17X22
Most Popular Rolls

**HARMAN**

SIZES FROM:
• 8.5X11 • 11x17
• 13x19
ROLLS UP TO 44" WIDE

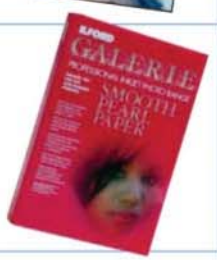
---

**INKPRESS**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

**ILFORD**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls




**Lumijet**

SIZES FROM:
• 8½x11 • 11x17
• 13x19 • 17x22
No Rolls

---

**MOAB**
BY LEGION PAPER

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

**Kodak**

SIZES FROM:
• 4x6 up to • 11x17
Most Popular Rolls

**HEWLETT PACKARD**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

---

**PICTORICO**
Ink Jet Media

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

**Hahnemühle**
FINEART

SIZES FROM:
• 8½x11 up to • 35x46.75
Most Popular Rolls

**Canon**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

---

**EPSON**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

**INNOVA**

SIZES FROM:
• 8½x11 up to • 17x22
Most Popular Rolls

**mediastreet**

SIZES FROM:
• 4x6 up to • 17x22
Most Popular Rolls

e7/2008

---


42 West 18th Street New York, N.Y. 10011
info@adorama.com www.adorama.com


ADORAMA INC.
Source for the **Educated Photographer**


Order Toll Free USA / Canada - 800-223-2500
Orders & Information - 212-741-0052

THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

Tokina
12-24mm f/4 AF PRO DX AT-X
• Exclusively for Digital SLR cameras
• Fast internal focusing with Tokinais One-
• Touch focus clutch mechanism

Kenko
PRO 300 AF CONVERTORS
• 1.4x Pro DG Series
• 2x Pro DG Series
• 3x Pro
EXTENSION TUBES
Autofocus Auto
Available for Canon EOS, Nikon AF, Pentax AF, Maxxum
• 25mm • 12mm
Auto Set for AF SLR's
Consists of 36, 20, & 12mm Ext. Tubes. Available for Maxxum, EOS, Pentax AF, (manual focusing)
Full Function AF Auto Extension Tube Set for Nikon AF DG Series

PROOPTIC
APO 420-800MM SUPER ZOOM
Ultra Compact Zoom (8")
249.95
• T-Mount Lens fits most 35mm SLR's
• Lightweight: only 16 oz.
• Semi-apochromatic design with 4 elements in 2 groups
• One Aspherical element for high Contrast
• F 8.3–11
LENSES
.25x Super Fish-eye Lens
Attaches to the front of a 35mm lens for a 180 degree fish-eye effect
69.95
.42x Semi Fish-Eye Lens
Attaches to the front of a 35mm lens for a really wide angle view.
39.95

TAMRON
SEE OUR WEB SITE FOR CURRENT REBATES
6 YEAR WARRANTY
TAMRON USA
AF 18-200MM F/3.5-6.3 XR DI II
for Digital SLR Cameras
Low Dispersion
Extra Refractive Index Glass

NEW LENSBABY™
• Composer™: is an entirely new lens that promises the greatest ease of use and most rewarding results of any Lensbaby lens. Users simply tilt and focus.
• Muse™: updates and replaces the Original Lensbaby and Lensbaby 2.0 with a tube based lens that features the new Lensbaby Optic Swap system
• Control Freak™: is an update of the Lensbaby 3G that now features the Lensbaby Optic Swap System

FREE Shipping
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

SIGMA
Made Exclusively in Japan
Perfecting the way photographers work

Compare features / Compare values Sigma delivers!

SD-14 Digital SLR
Digital SLR Camera Body, 14 Megapixel, Foveon X3 Direct Image Sensor
Key Features:
• Image Sensor Dust Protector
• Easy to use multifunction interface
• High speed continuous shooting
• Large 2.5" LCD monitor
• Built-in Flash

AUTO FOCUS FLASHES

| Lens Mount | Sony | Canon EOS | Nikon AF | Pentax | SIGMA | Olympus |
|---|---|---|---|---|---|---|
| EF 530 DG Super | 269.00 | 269.00 | 269.00 | 269.00 | 269.00 | — |
| EF 530 DG ST | 189.00 | 189.00 | 189.00 | 189.00 | 189.00 | — |
| EM 140 DG | – | 369.00 | 369.00 | – | 369.00 | — |

LENSES FOR AUTO-FOCUS & MANUAL CAMERAS

| Lens Mount | Sony | Canon EOS | Nikon AF | Pentax | SIGMA | Olympus |
|---|---|---|---|---|---|---|
| 4.5 12.8 EX DC HSM Cir Fisheye | — | 899.00 | 899.00 | — | 899.00 | — |
| 8/3-5 DG Fisheye | 759.00 | 759.00 | 759.00 | 759.00 | 759.00 | — |
| 10 2.8 EX DC HSM Fisheye | — | 649.00 | 649.00 | — | 649.00 | — |
| 15/2.8 EX DG Fisheye | 609.00 | 609.00 | 609.00 | 609.00 | 609.00 | — |
| 20/1.8 EX-DG | 459.00 | 459.00 | 459.00 | 459.00 | 459.00 | — |
| 24/1.8 EX-DG | 389.00 | 389.00 | 389.00 | 389.00 | 389.00 | — |
| 28/1.8 EX-DG | 299.00 | 299.00 | 299.00 | 299.00 | 299.00 | — |
| 30/1.4 EX-DC | 489.00 | 489.00 | 489.00 | 489.00 | 489.00 | 489.00 |
| 50 1.4 EX DG HSM | 499.00 | 499.00 | 499.00 | 499.00 | 499.00 | 499.00 |
| 50 2.8 EX DG Macro | 279.00 | 279.00 | 279.00 | 279.00 | 279.00 | — |
| 70/2.8 EX DG Macro | 479.00 | 479.00 | 479.00 | 479.00 | 479.00 | — |
| 105/2.8 EX-DG | 439.00 | 439.00 | 439.00 | 439.00 | 439.00 | 439.00 |
| 150 2.8 EX DG Macro APO | — | 669.00 | 669.00 | — | 669.00 | 669.00 |
| 180/3.5 EX DG Macro | 899.00 | 899.00 | 899.00 | 899.00 | 899.00 | — |
| 300/2.8 APO EX-DG | 2999.00 | 2999.00 | 2999.00 | 2999.00 | 2999.00 | — |
| 500/4.5 APO DG | 4699.00 | 4699.00 | 4699.00 | 4699.00 | 4699.00 | — |
| 800/5.6 EX APO DG HSM | 7399.00 | 7399.00 | 7399.00 | 7399.00 | 7399.00 | — |
| 10-20/4-5.6 EX-DC | 569.00 | 569.00 | 569.00 | 569.00 | 569.00 | 569.00 |
| 12-24/4.5-5.6 EX-DG Asph | 779.00 | 779.00 | 779.00 | 779.00 | 779.00 | — |
| 17-70/2.8-4.5 DC Macro | 399.00 | 399.00 | 399.000 | 399.00 | 399.00 | — |
| 18-50/2.8 DG EX | 449.00 | 449.00 | 449.00 | 449.00 | 449.00 | 449.00 |
| 18-50/3.5-5.6 DG | 139.00 | 139.00 | 139.00 | 139.00 | 139.00 | 139.00 |
| 18-125/3.8-5.6 DC OS HSM | 399.00 | 399.00 | 399.00 | 399.00 | 399.00 | — |
| 18-200/3.5-6.3 DC OS | — | 499.00 | 499.00 | — | 499.00 | — |
| 18-200/3.5-6.3 DC | 379.00 | 379.00 | 379.00 | 379.00 | 379.00 | — |
| 24-70/28 EX-DG DF | 499.00 | 499.00 | 499.00 | 499.00 | 499.00 | — |
| 28-70 2.8 EX DG | 379.00 | 379.00 | 379.00 | 379.00 | 379.00 | — |
| 28-70 2.4 DG | 149.00 | 149.00 | 149.00 | 149.00 | 149.00 | — |
| 28-300/3.5-5.6 DG IF Macro | 319.00 | 319.00 | 319.00 | 319.00 | 319.00 | — |
| 50-150 2.8 EX DG HSM II | – | 749.00 | 749.00 | — | 749.00 | — |
| 50-500/4-6.3 EX DG APO HSM | 1159.00 | 1159.00 | 1159.00 | 1159.00 | 1159.00 | 1159.00 |
| 55-200/4-5.6 DC | 149.00 | 149.00 | 149.00 | 149.00 | 149.00 | 149.00 |
| 70-200/2.8 EX HSM Macro II | 799.00 | 799.00 | 799.00 | 799.00 | 799.00 | 799.00 |
| 70-300/4-5.6 APO EX DG | 249.00 | 249.00 | 249.00 | 249.00 | 249.00 | — |
| 70-300 /4-5.6 DL-Mac DG | 149.00 | 149.00 | 149.00 | 149.00 | 149.00 | — |
| 100-300 /4 DG EX-IF HSM | 1199.00 | 1199.00 | 1199.00 | 1199.00 | 1199.00 | — |
| 120-300 2.8 EX HSM DG | — | 2999.00 | 2999.00 | — | 2999.00 | — |
| 120-400 F4 5.6 DG APO OS HSM | — | 849.00 | 849.00 | — | 849.00 | — |
| 135-400 DG APO Asph | 599.00 | 599.00 | 599.00 | 599.00 | 599.00 | 599.00 |
| 150-500 5/6.3 DG APO HSM | — | 979.00 | 979.00 | — | 979.00 | — |
| 200-500 2.8 EX DG APO | — | 24499.00 | 24499.00 | — | 24499.00 | — |
| 300-800/5.6 EX DG APO HSM | — | 7999.00 | 7999.95 | — | 7999.00 | 7999.00 |
| 1.4X APO Extender | 219.00 | 219.00 | 219.00 | 219.00 | 219.00 | — |
| 2X APO Extender | 239.00 | 239.00 | 239.00 | 239.00 | 239.00 | — |

EF 530 DG ST Flash
Powerful guide number of 174 Covers a focal length from 24mm to 105mm. Autozoom function

EF 530 DG Super Flash
Powerful guide number of 174 Focal length from 24mm-105mm. Autozoom function Wireless TTL

18-50mm F2.8 EX DC
DC Series for Digital cameras IF (Inner Focus) EX-finished ASP Aspherical Lens

10-20mm F4-5.6 EX DC HSM
DC Series for Digital cameras HSM (Hyper Sonic Motor) EX-finished

17 - 70mm f/2.8-4.5
DC Macro AutoFocus Wide Angle Zoom Lens for Sigma Cameras

30mm F1.4 EX DC HSM
The most appropriate coating for digital SLR cameras Equipped with HSM (Hyper Sonic Motor) system

SHIPPING INSTRUCTIONS See Our Web Site WWW.ADORAMA.COM For Shipping Charges And Relevant Information.

42 West 18th Street New York, N.Y. 10011
www.adorama.com • 800.223.2500

ADORAMA INC.
Source for the Educated Photographer

# 3 WAYS TO Fix a Photo's Background

BY KATHLEEN DAVIS

What surrounds the subject in a photograph can make or break the shot. Get the background wrong (too distracting or cluttered, for instance), and it draws attention away from your subject. Get it right, and it pulls together all of the elements in a photo to create a perfect composition. Here are three ways to improve your backgrounds.

1 **Watch out for competing lines, colors, and patterns.** If your subject has strong lines, for example, you want to avoid a background with any sort of line or pattern—it will make your image too busy and confusing. If possible, move your camera or your subject to avoid competition from the background.

2 **Blur it out.** Can't avoid a distracting background? Smear out the details with a shallow depth of field by shooting with a lens that has a long focal length or a wide aperture. To make your subject to stand out, or to give your picture a sense of action, try panning with your subject's movement to create a streaked and blurry background.

3 **Fill the frame.** The background won't compete with your subject if you eliminate it altogether. Either zoom in or simply step closer.

# THE ULTIMATE IN PHOTO SHOPPING:
# www.adorama.com

14 Day Money Back GUARANTEE *Please check our website for details*

**FREE Shipping** ON THOUSANDS OF PRODUCTS SEE OUR WEB SITE

## PROFESSIONAL PRINTERS

**UP TO $200 MAIL-IN REBATE WHEN PURCHASED TOGETHER WITH ANY SLR DIGITAL CAMERA**

EPSON
PROFESSIONAL IMAGING
AUTHORIZED RESELLER

**Stylus R2880**

8 Color 13" Wide Inkjet Color Printer, 5760 x 1440 Optimized dpi with USB 2.0 Interface, PictBridge

**Stylus Photo R1900**

13" Wide Inkjet Color Printer, 8 Color, with USB 2.0

Canon
PIXMA PRO 9000

Maximum 4800 x 2400 dpi FINE print head technology8-color ChromaLife100 dye ink systemSupport for fine art paper up to 13" x 19"two separate paper paths, including front feeder for heavyweight paper types

Canon
PIXMA MP960 ON SPECIAL

Photo All-in-One Multi-functional Color Bubble Jet Printer with 3.5"LCD Viewer, 7 Color, 8.5" x 11.7", USB Interface, for Mac & Windows.

HEWLETT PACKARD
PHOTOSMART B9180

## DIGITAL CAMERAS

Nikon OLYMPUS Panasonic PENTAX SAMSUNG Leica

**FOR OUR FULL SELECTION OF SLR and POINT & SHOOT CAMERAS CLICK WITH CONFIDENCE AT ADORAMA.COM**

Canon
SONY
FUJIFILM PRO DEALER AUTHORIZED DIGITAL CAMERAS

RICOH SIGMA MINOX GE

FUJIFILM Kodak CASIO

42 West 18th Street New York, N.Y. 10011
info@adorama.com www.adorama.com

ADORAMA INC.
Source for the Educated Photographer

Order Toll Free USA / Canada - 800-223-2500
Orders & Information - 212-741-0052

THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

# DON'T MISS THE ACTION

CASIO

## EX-F1

- 60 frames per second High Speed Burst mode
- 1,200 frames per second High Speed Video
- 6 Megapixel
- 12x optical zoom

## EX-FH20

- 40 frames per second High Speed Burst mode
- 1,000 frames per second High Speed Video
- 7 Megapixel
- 20x optical zoom

With the Casio Exilim High Speed Cameras you can capture high resolution images at blistering speeds providing more images to choose from than with a DSLR. What makes these cameras truly unique is that with the push of a button you can shoot high definition video and switch to high speed, slow motion video. Use the high speed video function to capture movement that you cannot see with the naked eye.

For additional information on Casio's Exilim High Speed Cameras, visit http://exilim.casio.com.

HIGH SPEED EXILIM

©12/2008

42 West 18th Street New York, N.Y. 10011
info@adorama.com www.adorama.com

ADORAMA INC.
Source for the Educated Photographer

Order Toll Free USA / Canada - 800-223-2500
Orders & Information - 212-741-0052

# THE ULTIMATE IN PHOTO SHOPPING: www.adorama.com

**FREE Shipping** ON THOUSANDS OF PRODUCTS SEE OUR WEB SITE

## DIGITAL PHOTO FRAMES

**COBY**

DP-888 8" Digital Photo Frame

CYDP888

with MP3 Player & Black, Brown Interchangeable Wooden Frames, 4:3 Aspect Ratio

**CTA**

Digital 15" Digital Picture Frame

CTAIPF15

with Wireless Remote Control & Stereo Speakers

**PHILIPS**

9" LCD Digital Photo Display Frame

with Memory Card Slots & USB Interface Frame Wood

PH9FF2CWO37

**Smartparts**

8"LCD Brown Wood W/Printer

IPR8PRT

**DIGITAL FOCI**

Pocket Album, 1.5" Photo Viewer with Key Chain, Holds up to 74 Images

DFPV15BK

TRICOD INC.

Mustek · hiti · TAO · BRAUN PHOTO TECHNIK · Digital Spectrum · mediastreet. · PORTABLE USA · IMPECCA · JOBO · SUNPAK

## PHOTO ACCESSORIES

**FLASHPOINT**

**Film And Slide Image Scanner**

turns negatives and slides into five megapixel digital images at the press of a button!

$74.00

**FLASHPOINT**

Quick Flip Flash Bracket offers high value, compact size, light weight and fast handling. The Quick Flip accepts all DSLR cameras except those with large, accessory battery packs or motor drives.

$44.95

**HAKUBA**

Camera Grip PH with Wrist Support

$24.95

**Lastolite**

Collapsible Hilite Background 6x7 $409.95

**GIOTTO**

Rocket Air Blaster, Manual Air Blower with Extra-Large Rubber Bulb - 7.5" Long

$11.95

**HAKUBA**

Mini Pro Lens Cleaning Pen, Safe for All Optics.

$9.95

**PHOENIX**

28-210mm f/4.2-6.5 AS / IF Tele Wide Zoom Auto Focus Lens for Nikon AF

$89.95

**PHOENIX**

SmartFlash RF46N Macro Ring Flash for Nikon iTTL with 55mm, 58mm, 62mm & 67mm Adapter Rings, Guide Number of 46 at ISO 100 feet

$99.95

**PHOENIX**

28-80mm f/3.5-5.6 Tele Wide Zoom Auto Focus Lens for Nikon AF

$59.95

**PHOENIX**

Digital SmartFlash 99C Power Zoom, Bounce Shoe Mount ETTL-II Flash for Canon EOS SLR's, Guide Number 99

$59.95

**ZAGG**

Screen Protectors for

- Digital Cameras
- GPSs
- iPod
- Media Players

FROM $6.95 TO $24.95

**VisibleDust**

Brite Vue XL Sensor Loupe 7x

$89.95

**CamGrip**

A No Slip Grip & Steadier for all Digital Cameras, Attaches to Tripod Thread

$7.95

**FM Photography**

Shutter Hat Camera Cover

$39.95

**Stedi-Stock**

Shoulder Brace Stabilizer for Cameras, Camcorders & Spotting Scopes

$39.95

**RedWing**

Cocoon 130 - Light Tent (Designed to photograph objects up to 15.75 x 21.5"), elimi-nates shad-ows.

$129.95

**Honlphoto**

Speed Strap for Shoe Mount Flashes

$9.95

**Falcon / Marshall**

Personal Size Straight Blade Paper Cutter for Photo & Digital Paper - 14"

$18.95

**GARYFONG**

Origami Diffuser - Fold Flat Flash Diffuser

$29.95

©11/2008

42 West 18th Street New York, N.Y. 10011
info@adorama.com www.adorama.com

ADORAMA INC. Source for the Educated Photographer

Order Toll Free USA / Canada - 800-223-2500
Orders & Information - 212-741-0052

THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com
FREE Shipping
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

Your pop-up flash pictures don't have to be UGLY!!

Professor Kobré's Lightscoop™ "produces nuanced, natural, flattering light on your subject; the before-after difference is incredible."
David Pogue, New York Times

Simply redirect the pop-up flash with Professor Kobré's Lightscoop to produce pro-like lighting with these cameras:

Canon 10D, 20D, 30D, 40D, Canon Rebel XTi, 40D, XT, 350, Nikon D40, D40x, D50, D60, D70, D70s, D80, D100, D200, D300; Pentax K10D, K20D, K100D, K200D; Sigma SD14, Fuji FinePix Pro S series.

Standard Lightscoop shown. Warming Lightscoop also available.

Patent Pending.

Professor Kobré's Light scoop

Only $29.95, exclusively at Adorama.com

FILTERS

cokin®
We are one of the largest Cokin Stocking Dealers in the USA

10% OFF When You Buy 3 Cokin Filters

B+W

5% OFF When You Buy 3 B&W Filters

HOYA FILTERS

10% OFF When You Buy 3 Hoya Filters

PRO1 Digital Filter Series

LEE Filters

NEW heliopan

See our web site for our full line of heliopan Filters @ www.ADORAMA.com

TIFFEN Digital HT™

Digital HT™
A Major Breakthrough in Multi-Coated Filter Technology

Tiffen's Digital HT filters are available as:

- Digital Ultra Clear™
- Haze 86 (with 86% UV absorption)
- Circular Polarizer
- 812® Warming Filter
- ND 0.6
- ND 1.2
- Soft/FX® 3
- Star 4 Point 2
- Color-Grad® ND 0.6

In sizes 52mm-82mm with distinctive soft pouch for storage.

- Superior Transmission
- Easy-to-Clean Surface
- Low-Profile Filter Ring
- Distinctive Titanium Finish
- Anti-Reflective Lock Ring
- Water-White Glass
- Scratch Resistant
- Tough and Durable
- 10-Year Warranty
- Made in USA

TIFFEN Dfx digital filter suite

Unlike other digital software. Tiffen Dfx offers effects that simulate the extensive range of Tiffen's world renown optical filters, plus much, much, more.

Available as a Stand-alone application and as a plug-in for Apple Aperture, Final Cut Pro, Adobe After Effects, Photoshop and Avid Editing Systems.

Go to tiffen.com for free 15-day trial version.

Tiffen Digital Filter Kits

Pre-assorted kits

No guesswork! Get more – pay less

Also Available DV Video Kits

Digital Enhancing Kit
Digital Ultra Clear, Circular Polarizer, 812®, ENHANCING®, Pouch

Digital Pro SLR Kit
Digital Clear, Color-Grad® ND 0.6, Pro-Mist® 2, Cleaning Cloth, Pouch

Wedding Portrait Kit
Warm Soft/FX® 3, Black Pro-Mist® 3, Warm Pro-Mist® 3, Pouch

Wide Angle Kit
Wide Angle UV Protector, Circular Polarizer, ENHANCING®, Pouch

©11/2008

42 West 18th Street New York, N.Y. 10011
www.adorama.com • 800.223.2500

ADORAMA INC.
Source for the Educated Photographer

EXPERT TIPS

# BY THE BOOK

COMPILED BY KATHLEEN DAVIS

## EXTREME PHOTO

Some of the best pictures are born of the worst conditions. Here are some ways to get rewarding photos in challenging situations.

- From the air: The main technical challenge is vibration, so set a fast shutter speed and use a normal or telephoto lens with image stabilization. Also, propellers often show up in photos, even when their spinning keeps you from seeing them when you look out the window.
- Underwater: Water absorbs light selectively, appearing greener near the surface and more blue deeper down. Get accurate color with flash units designed for underwater photography.
- Cold: Frigid weather can sap battery power, and going inside can cause condensation on your equipment. Enclose your gear in plastic bags or an airtight box and let it warm up before removing it.
- Heat: Most new cameras work in temperatures hotter than people even can handle. But in high humidity, mold grows fast on film and electronics. So keep your gear in a waterproof container with pack of silica gel.

ADAPTED FROM *FUNDAMENTALS OF PHOTOGRAPHY: THE ESSENTIAL HANDBOOK FOR BOTH DIGITAL AND FILM CAMERAS* BY TOM ANG (RANDOM HOUSE, 2008; $25)

## MASTER OF DISGUISE

Homemade colored and diffusion filters may not match the quality of commercial ones, but they can produce results that aren't otherwise possible. Here are a few ideas to try.

- Crumple up a piece of cellophane, then smooth it out and attach it to the front of your lens with a rubber band.
- Apply a fine mist of spray matte material on an unwanted clear filter or a plain piece of glass.
- Brush some clear nail polish on an unwanted UV filter. Try different patterns for a variety of possibilities.

ADAPTED FROM *LIGHT AND LENS: PHOTOGRAPHY IN THE DIGITAL AGE* BY ROBERT HIRSCH (FOCAL PRESS, 2008; $50)

# THE ULTIMATE IN PHOTO SHOPPING:
# www.adorama.com

**14 Day Money Back GUARANTEE** *Please check our website for details*

**FREE Shipping** ON THOUSANDS OF PRODUCTS SEE OUR WEB SITE

## SOFTWARE

Adobe

LaserSoft Imaging™

NIK

Realviz

onOne software

ColorVision

ErgoSoft RIPs for Creative Professionals

Dg foto ART Digital Imaging Software

x-rite

DXO

eXpressdigital DARKROOM

PHASE ONE

**SEE OUR WEB SITE FOR A FULL LISTING**

## DIGITAL PRINTERS

EPSON PROFESSIONAL IMAGING

**Stylus Pro 4880**

17" Colorburst Inkjet Printer, 2880 x 1440 DPI Resolution, 16-bit Printer Drivers with USB 2.0 & Ethernet Interfaces

hiti **S420**

Passport Photo Printer with 2.5" LCD Controller & USB Interface, 403 x 403 DPI, for Mac & Windows.

Kodak HEWLETT PACKARD Canon

## SCANNERS

EPSON **Perfection V700**

Photo Photo Flatbed 4800x9600 dpi, 48 bit, built-in 8"x10" Transparency Unit, USB 2.0 & FireWire

PACIFICIMAGE **PrimeFilm 7250 Pro3**

35mm Film Scanner 7200dpi USB 2.0 & Firewire Interface

BRAUN PHOTO TECHNIK **Multimag 4000**

for 35mm Transparencies, with Digital Ice Technology, USB & Firewire Interface, for Mac & Windows.

MICROTEK **ArtixScan M1 Pro**

Media All-in-One Flatbed Scanner, 8.5" x 14", 4800-Dpi, USB Interface, & Silverfast Ai Studio

## MP3 PLAYERS

Microsoft® zune

**Microsoft Zune**
4/8/80 GB Digital **Media Player,**
Black, Green, Pink, Red

SanDisk

**Sansa Shaker**
1 GB SD Card & Built-In Speaker
.....IDSMP3SH1GPK

**Sansa Clip Series**
1 GB SD .....IDSSCMP3BK1G

**Sansa Fuze Series**
4 GB SD

## VOICE RECORDERS

**DS-40**
- Record Up to 137 Hours 512MB
- With the STXQ Recording Mode.
- Stereo and Two Channel Recorder.
- Removable Stereo Microphone with Remote Control.
- 5 Recording Modes.

IOMD540

**VN-4100 PC**
- Transfer files quickly & easily.
- Record up to 144 audio in LP.
- Slow & Fast Playback.
- Voice activation.
- Index marks for easy retrieval.
- Specific time for reminders or wake-up calls.

IOMVN4100PC

**WS-331**
- USB mass storage class,
- Backlight Full-Dot LCD
- 2 GB of internal Flash memory
- Recording Format: WMA
- Includes Microphone & Earphone Jack
- Built-in speaker

IOMWS331

**WS-321M**
- Record: Built-in stereo microphone
- 1GB internal flash memory
- WMA recording format
- 277 hr. recording time LP mode
- Six recording modes:
- Voice Filter enhances
- Slow and fast playback speed variations

IOMWS321M

## DIGITAL STORAGE

EPSON

**Multimedia Storage & Viewer, with USB 2.0 Interface & 4" LCD**

P3000 40 GB .....*JESP3000*
P6000 80 GB .....*JESP6000*
P7000 160 GB .....*JESP7000*

DIGITAL FOCI

**Photo Safe, Portable Picture Storage Hard Drive with Card Reader, USB Interface.**

40 GB .....*DFPS40G*
80 GB .....*DFPS80G*
120 GB.....*DFPS120G*

Wolverine

**ESP Multi-Media Player** with built-in 7 in 1 Memory Card Reader 3.6" wide view angle TFT LCD with adjustable Back Light multiple features

80 GB .....*WVESP80*
120 GB .....*WVESP120*
160 GB .....*WVESP160*

JOBO

**Giga Vu Pro Evolution Multimedia Photo Storage System and Viewer for Professionals**

40 GB .....*JCDGVPE40*
80 GB .....*JCDGVPE80*
120 GB.....*JCDGVPE120*

HYPERDRIVE
Memory Card Backup Device
SPACE

- Fastest Memory Card Backup
- Fastest USB Transfer Speed
- Most Powerful Battery
- Directly accept 18 different card types
- Unlimited capacity

| Space | Color | Color "O" |
|---|---|---|
| 40GB | 40GB | 40GB |
| 80GB | 80GB | 80GB |
| 120GB | 120GB | 120GB |
| 160GB | 160GB | 160GB |
| — | 250GB | 250GB |

## MEMORY CARDS

SanDisk

Kingston TECHNOLOGY

OLYMPUS

DANE-ELEC Memory

Transcend

DELKIN DEVICES

HOODMAN

Panasonic

SONY

Kodak

Lexar

**SEE OUR WEB SITE FOR OUR FULL LINE & PRICES**

©11/2008

Customer Relations 800-815-0702 212-741-0466
Mon–Thur. 9–4:30, Fri. 9-1, EST • FAX # 212-463-7223

ADORAMA INC.
Source for the Educated Photographer

STORE: 212-675-6789
HOURS: Mon.-Thurs. 9-6:30pm • Fri to 1:00 • Sun. 9:30-5:30

# THE ULTIMATE IN PHOTO SHOPPING: www.adorama.com

**FREE Shipping**
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

**WE CARRY A FULL LINE OF VIDEO, MULTIMEDIA & ACCESSORIES**
*for a complete listing visit our web site*

## Canon
Check out all canon HD Cameras

## Panasonic
We carry the full pro line and accessories

## SONY
Authorized USA DEALER

## JVC
We carry the full line of cameras and monitors and accessories

## VIDEO BATTERIES

**anton bauer**
The source of professional Batteries, chargers and battery adaptors

**bescor**
A complete line of battery packs & Belts

**I·D·X**

The professional's choice for V mount and NP style batteries and chargers

## VIDEO STABILIZING SYSTEMS

**GLIDECAM 2000 PRO**
Complete line of stabilizers and vests from the small Mini DV cameras to the full size camera

**VariZoom Lens Controls**
Full line of lens Controls, Stabilizers and Batteries for the prosumer and pro cameras

**STEADICAM**
- Merlin
- Flyer
- Pilot
- Accessories

## COMPUTER EDITING

**Adobe**
- Premiere Pro
- After Effects
- Audition
- Creative Suite
- Production Studio

**matrox** Digital Video Solutions
Professional Realtime Native HDV and DV Editing System with Adobe Premiere Pro CS3 Software for Windows

**datavideo**

- Analog to DV Converter
- Time Base Correctors
- Video Mixers

**Professional strength storage solutions for demanding applications!**
- G-RAID2 • G-DRIVE Q
- G-DRIVE-mini • G-SAFE

## AUTHORIZED SONY U.S.A. DEALER

**We carry a full line of Sony products for immediate delivery at the best prices**

## VIDEO LIGHTS

**LITE PANELS™**
- Heat-free LED technology
- Produces bright, soft light Integrated dial for instant 100% to 0 dimming

**bescor**
- 20w/35w Multi-Purpose Light
- Light & Battery Combo Kits
- Studio 12v DC Broadcast Light
- Light& Battery Combo Kits
- Dual Use AC/DC Commercial Light

**Frezzi** ENERGY SYSTEMS
- Standard Mini-Fills
- Dimmer Mini-Fills
- Dimmer Led Mini-Fills
- Standard Micro-Fills
- Dimmer Micro-Fills
- 10 Watt Micro-Sun Gun HMI'S

**NRG**
- Studio / Location Lighting
- On-Camera Lighting
- Stands / Trusses, Clamps, & Fittings

## VIDEO TRIPODS

**sachtler** Professional Tripods
- Fluid Heads
- Tripods
- Pedestals
- System Packages

**Libec**
**LS38(2A) Tripod System**
- Supports 17.6 lbs
- Maximum Height 63"
- 75 mm ball
- Spreader & Case included

**MILLER**
- Mini DV Systems & DV CAM
- Arrow 25 Systems:
- Arrow 40 Systems:
- Arrow 55 Systems:
- Pro jibs • Pedestals

**CARTONI**
- Action Pro
- Focus series
- Laser • Gamma
- Delta
- Master

**ARRI**
- Tungsten lighting
- Fresnel lighting
- HMI lighting
- Fluorescent lampheads

**COOL-LUX** PRO TOOLS FOR THE TRADE
- Digi-Lux Dimmable
- Mini cool lights
- Micro lux lights
- Soft lights
- Mini soft lights
- Hollywood kits

## VIDEO LENSES

**Century** precision optics
Professional and HD grade lenses from Fisheye to telephoto

**FUJINON**
Complete Line of Fish eye ,wide angle and Telephoto lenses

**CAVISION**
Broadcast Series 3-Element Zoom-Through Converter Lenses, Matte boxes & Filters

**PROOPTIC**
(0.42x Semi Fisheye)

**16X9 INC**
- Add on lenses
- Lens controllers
- Noga arms
- Chrosziel Pro Matte Boxes

## VIDEO CASES

**Petrol**
Petrol Compact Camcorder Bag for Mini-DV/HD removable dividers fits official carry on regulations.

Tough nylon oxford material waterproof coating, quick to deploy

**porta brace**
Ideal for compact pro mini DV/HD Camcorders DuPontd 1000 Denier Cordura, water repellent finish

## AUDIO

**SENNHEISER**
**Authorized Dealer**
Complete line of Shotgun professional wired and Wireless microphones

**AZDEN**
- Amateur wireless mics
- Professional wireless mics
- Dual Channel
- Shotgun Mixer

**BeachTek**

- MIC PREAMPLIFIER
- DUAL XLR audio ADAPTERs

42 West 18th Street New York, N.Y. 10011
info@adorama.com www.adorama.com

**ADORAMA INC.**
Source for the Educated Photographer

Order Toll Free USA / Canada - 800-223-2500
Orders & Information - 212-741-0052

THE ULTIMATE IN PHOTO SHOPPING:

# www.adorama.com

**14 Day Money Back GUARANTEE** *Please check our website for details*

**FREE Shipping** ON THOUSANDS OF PRODUCTS

SEE OUR WEB SITE WWW.ADORAMA.COM

# FLASHPOINT

## ADORAMA BUDGET STUDIO FLASH

- This economically priced AC strobe will allow you to create professional lighting results.
- The 110 volt unit plugs into any standard household socket.
- It has a circular flash tube that is daylight balanced at 5600 K, a guide number of 90 at ISO 100 and a recycling time of 4 seconds. It also comes with a 60 watt modeling lamp.
- The Budget Studio Flash can be triggered through the camera with its 12' sync cord (included), by another flash being fired and activating the built-in photo slave or through its open-flash test button.
- Specs: 6-1/2" long, 3-1/2" diameter. Weighs only 15 ounces.

(LTBF) ~~59.95~~ **$49.95**

### BARNDOORS

Four leaf barndoors designed to direct light and prevent light spill or camera lens flare

(LTBBD) **$9.95**

### SNOOT

Restricts light output to a narrow beam. It can be used as a hair light or for creative highlights,

(LTBSH) **$11.95**

### FILTER SET

Yellow, Green, Red & Blue

(LTBFS) **$9.95**

### SOFT BOXES

Softbox for the 100 watt Second Budget Monolight.

12"x12" (LTBSB12) **$19.95**

18"x18" (LTBSB18) **$29.95**

60 watt modeling lamp .....(LTBMLSN)..... **$5.95**

## NEW! Lower Prices

**Adorama AC Master Slave**

with PC Connection, Guide Number of 90 at ISO 100.

(LTACS) **$18.95**

**Adorama AC Slave Flash**

Guide number 90 at ISO 100.

(LTACMS) **$19.95**

**Adorama Color Filter Set**

for the AC Slave & AC Master Slave Flashes, Red, Green, Blue and Yellow

(LTACMS) **$4.95**

## BUY A BUDGET KIT AND SAVE

### BUDGET STUDIO FLASH KIT #1

2 – **Budget Studio Flashes**
2 – 7" Light stands
1 – 33" White Umbrellas with Black Cover
1 – Deluxe carrying case

(LTBK1) **$199.95**

### BUDGET STUDIO FLASH KIT #4



3 – **Budget Studio Flashes**
3 – 7" Light stands
2 – 33" White Umbrella with Black Cover
1 – Barndoors
1 – Snoot
1 – Set of 4 Color Filters
1 – Deluxe carrying case

(LTBK4) **$299.95**

# FLASHPOINT MONOLIGHTS

## Where Pro Power and Quality Meet At An Incredible Price.

Great lighting: Adorama Flashpoint II Monolights deliver-at an astonishingly high level of sophistication and quality and at remarkably low cost. Flashpoint Monolights deliver all the power you need--more blitz for the buck than any competitive units on the market Flashpoint II Monolights are the real deal-pro-caliber units you can rely on the give your images a competitive edge.

### FLASHPOINT MONOLIGHTS

| | Model | GN | Recycle | Weight | Sync | Price |
|---|---|---|---|---|---|---|
| FLASHPOINT | 320 | 118 | 1.2 Sec | 3.00 lbs. | 6v | $99.95 |
| FLASHPOINT | 620 | 192 | 1.2 Sec | 4.6 lbs. | 6v | $189.95 |
| FLASHPOINT | 1220 | 252 | 2.6 Sec | 5.25 lbs. | 6v | $279.95 |
| FLASHPOINT | 1820 | 282 | 3 Sec | 5.75 lbs. | 6v | $329.95 |
| FLASHPOINT | 2420 | 320 | 4.5 Sec | 6.20 lbs. | 6v | $399.95 |

### Buy a Flashpoint Kit & Save

**Flashpoint II kit**

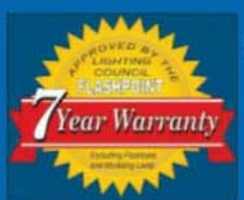
**Includes:** 1 Monolight, 10' Air Cushion Stand & a 40" Umbrella (White w/Black Cover)

320 Kit.....$129.95 620 Kit .....$229.95
1220 Kit.....$299.95 1820 Kit .....$359.95
2420 Kit.....$429.95

**Portrait Wedding kit**

**Includes:** 2 Flashpoint II Monolights, 2-10' Air Cushion Stands, 2-40" Umbrellas, Snoot, & Carrying Case.

320 Kit.....$329.95 620 Kit .....$499.95
1220 Kit.....$699.95 1820 Kit .....$799.95




$129.95

### FLASHPOINT ACCESSORIES

4 Leaf Barndoor FP2BD **$29.95**

Snoot FP2SN **$44.50**

10' Sync Cord FPSC **$12.95**

16" Soft Flood Reflector (Beauty Dish) FP2RSF **$44.95**

Softbox
24"x24" FPDPSB2424 **$39.95**
24"x36" FPDPSB2436 **$59.95**

Modeling Lamp for 620 FPML620 **$12.95**
1220/1820 FPML1220 **$14.95**

Flashtube for 620 FPFT620 **$39.95**
1220/1820 FPFT1220 **$49.95**

Customer Relations 800-815-0702 212-741-0466
Mon–Thur. 9–4:30, Fri. 9-1, EST • FAX # 212-463-7223

ADORAMA INC.
Source for the Educated Photographer

STORE: 212-675-6789
HOURS: Mon.-Thurs. 9-6:30pm • Fri to 1:00 • Sun. 9:30-5:30

THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

FREE Shipping
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

PHOTO ACCESSORIES

FLASHPOINT
5-IN-1 COLLAPSIBLE DISC REFLECTOR, Translucent, White, Black, Silver & Soft Gold

perfect for reducing contrast, warming skin tones, eliminating shadows or just softening light. They can be hand held or attached to a light stand with the extendable Reflector Holder

| 22 | 32 | 42 |
|---|---|---|
| FPPR5122 | FPPR5132 | FPPR5142 |
| 19.95 | 34.95 | 39.95 |

ADORAMA PORTABLE REFLECTOR BRACKET 22-58"

Shown With Stand & Translucent Refector

The Portable Reflector Bracket allows you to mount the Adorama Portable reflectors and any other similar reflectors onto a light stand. It is adjustable to hold Reflectors from 22" to 58" and can be rotated and swiveled for precise positioning. LTPRB 29.95

ADORAMA MACRO FOCUSING RAIL SET,

4 Way, Fine Control, Camera Focusing Rail To Aid In Tripod Mounted Macro Photography

MCFRS 174.95

ADORAMA INC.
Source for the Educated Photographer

**STREET SHOOTING:** Do you need to get a model release when you photograph candids of people out in public? We consulted two lawyers to find out.

# YOUR QUESTIONS ANSWERED

## Release police

I shoot candid street portraits and post them to my website, without model releases. Can I be sued?

*Sudi Patel*
*Edison, NJ*

*The general rule: You need a model release only if you use the photos for commercial purposes, including advertising, endorsement, or trade. As long as you never sell your images for these purposes, anyone photographed in a public place (minors included) is fair game. You don't need a model release if you sell prints of the photos as art, or if they're used in an editorial context. To read up on the law as it applies to photographers, check out the websites of attorneys Bert P. Krages (www.krages.com) and Carolyn E. Wright (www.photoattorney.com)—they both specialize in photography law and have written books on the subject.*

## Format compatibility

I want to upgrade from a Fujifilm FinePix S3 Pro to the full-frame Nikon D700, but I own only DX

ANDERSONRISE/FOTOLIA

Nikkors, for cameras with smaller sensors. Will I get by with them, or will I have to buy all new lenses?

*Francis Cramer*
*Via e-mail*

*Buy new. You'll almost certainly be disappointed with the D700 using DX lenses. Your 12.3MP Fuji S3 Pro captures much more detail with these lenses than the D700. That's because a DX throws an image circle covering only about 5.1MP of the D700's 12.1MP sensor—more than half its data is wasted. Hold off buying a D700 until you can afford at least one full-frame zoom. Not that you should immediately unload your DX lenses: In some low-light situations, the D700's sensor will give you much better pictures than the S3, regardless of lens.*

## Photo-friendly skies

Can airport X-ray machines affect pictures on a memory card?

*Meredith Smolarek*
*Charlotte, NC*

*No. None of the security equipment for either checked baggage or carry-ons harms memory cards, CDs, or DVDs. If your camera uses lithium ion batteries, though, carry them on. They've been banned from checked luggage because they sometimes overheat and ignite. Film should also be carried on—and hand-inspected.*

## Acronym alert

What does ACR stand for? A website hosting Adobe Photoshop tutorials uses the term, but never explains it.

*Nan Montgomery*
*Austin, TX*

*Adobe Camera Raw. It's Adobe's RAW converter plug-in for Photoshop.*

## Pixel problem

I needed to make large prints (12x18 inches) from files captured with a 6.3MP DSLR, but the prints are badly pixelated. Is there a way to improve them?

*Raymond Wyler, III*
*White Plains, NY*

*Yes, if you captured the images in the camera's RAW format. In an image editor, convert the RAW files to TIFFs and upsize them to 12x18 inches using a tool such as Adobe Photoshop's Image Size command. Select its Bicubic Smoother option. Then sharpen the files while viewing them at 50%. Chances are your prints will look pretty good at normal viewing distances (i.e., from no closer than 6 inches.) If you shot only JPEGs, try a fractal upsizer such as onOne's Genuine Fractals Print Pro.*

## Profiles in paper

Does my inkjet paper have to be the same brand as my printer?

*Alan Podrenko*
*Bethel Park, PA*

*It's better to stick with the same brand if you're new to printing and don't know much about color management. It's usually the easiest way to get prints that closely match your screen right off the bat. As you progress, however, you will probably be attracted to third-party papers. To use them, you'll need to visit the paper manufacturer's website and download paper profiles. Then, in Photoshop, load the profiles—the manufacturer's website will tell you how—and turn off the color management function in your printer driver. Color manage your images in Photoshop, instead.*

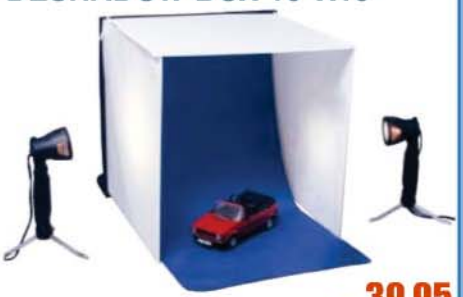
Got a question? E-mail us at PopEditor@hfmus.com. Also visit the Tech Support forum at www.PopPhoto.com.


THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

FREE Shipping
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

PHOTO ACCESSORIES

ADORAMA
DESHADOW BOX 16"X16"



LTPRB 39.95

Portable Still Life Studio In-A-Bag,
with 16" x 16" Soft Light Box, Halogen Lamps,
Blue Background Sweep, & Custom Carrier

W/optional Table Top 2 Section Tripod : only $49.95

PROOPTIC

RIGHT ANGLE
FINDER

With 1X and 2X
Magnification

Item Includes:
Adapters for Most SLRs,
both Digital & Film

CZRAF2
69.95

ADORAMA PRO CLAMP

with Reversible
Mounting Stud.
1/4 x 20 and 3/8
Screw Threads

LTPC 16.95

ADORAMA
REVERSIBLE
SHORT STUD

for Pro Clamp,
1/4 & 3/8 Threads

LTPCSR 2.95

ADORAMA INC.
Source for the Educated Photographer

THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

FREE Shipping
ON THOUSANDS OF PRODUCTS
SEE OUR WEB SITE

UNDERWATER PHOTOGRAPHY

FILING & STORAGE

flora
PROFESSIONAL ALBUMS
SUPERIOR MOUNT ALBUMS
- Bonded Leather cover
- Pressure sensitive page to hold print in place with dual peel away release paper for easy placement of photo
- Individual strong gift box
- Available in Black or Chocolate

FLASHPOINT

PORTFOLIO
CARRYING CASES
• Deluxe padded carrying case • Constructed of black Softex material with interior padding • Has a detachable strap and carrying handle with pad • Quick-snap, secure buckles • Large zippered security pocket on the back of the bag • Window for ID or business card

**8x10** (up to 8-1/2 x 11 x 2") .....**29.95**
**11 x 14 x 2** (up to 11 x 14 x 2") .....**39.95**
*Don't let the low prices fool you.*
**Flashpoint cases are comparable to cases costing twice as much**

ADORAMA
ARCHIVAL BOXES
Made From acid-free materials and contain no products that might harm photos or negatives. Plus they contain a unique patented dual chemistry to give your photos the best possible protection
**ARCHIVAL MASTER BOXES**
Holds and includes 6 slide boxes

**ARCHIVAL PRINT BOXES**
Archival fiberboards developed specifically for long-term storage of photographic materials. With metal reinforced corners, 3" deep.

Print File
**ARCHIVAL PAGES**

| Sheets | 25 | 100 |
|---|---|---|
| 35mm Slide Pages | 8.50 | 29.95 |
| Most Negative Pages | 5.95 | 19.95 |
| Ultima Negative Pages | 7.50 | 24.95 |
| Contact Pages | 9.95 | 34.95 |
| Print Pages | 9.50 | — |

Oversize Binder OB-1 ....**9.95**
Work Box 2.5" .....**15.95**

ADORAMA INC.
Source for the **Educated Photographer**

Listed below are all of the advertisers in this issue and the pages on which the ads appear.

## ADVERTISERS INDEX

ADVERTISERS INDEX


| Reader Service | Page(s) |
|---|---|
| Abes of Maine | 109 |
| Adorama | 85, 93, 107, 127-139 |
| Anthropics | 25 |
| B&H Photo | 115-125 |
| Beach Camera | 111 |
| Buy Dig | 95 |
| Calumet | 39 |
| Checkrated | 106 |
| Circulation | 97, 99 |
| Classified | 94, 102-105 |
| Delkin | 26-27 |
| Digicombos | 113 |
| Graphic Authority | 91 |
| HP Marketing | 99 |
| Lensbaby | CVR3 |
| Lexar Media | 65 |
| Mentor Series: Alaska | 20-21 |
| Mentor Series: Japan | 8-9 |
| Mpix | 28-29 |
| Newegg | 79 |
| Nikon | 6-7 |
| NYIP | 17 |
| Olympus | CVR4 |
| Panasonic | 11, 41-56 |
| Popphoto.com | 110 |
| Really Right Stuff | 33 |
| Ricoh | 88 |
| Samy's Camera | 108 |
| Seiko Epson | 12 |
| Sigma | 2-3 |
| Sony | CVR2-1, 58-59, 72 |
| Tamrac | 31, 101 |
| Tamron | 15 |
| THK | 34-35, 38 |
| Tiffen | 77 |
| Tocad | 67, 83 |
| Tristate | 112 |


POPULAR PHOTOGRAPHY (ISSN 1542-0337) (USPS 504-890), January 2009, volume #73, issue #1, is published monthly by Hachette Filipacchi Media U.S., Inc., 1633 Broadway, New York, NY 10019. Periodicals postage paid at New York, NY 10001 and at additional mailing offices. Authorized periodicals postage by the Post Office Department, Ottawa, Canada, and for payment in cash. POSTMASTER: Send address changes to Popular Photography, P.O. Box 54915, Boulder, CO 80322-4915; (386) 597-4375; Fax (303) 604-7644; popphoto@neodata.com. If the postal services alert us that your magazine is undeliverable, we have no further obligation unless we receive a corrected address within one year.

Publications Mail Agreement No. 40052054, Canadian Registration Number 126018209RT0001, Return undeliverable Canadian addresses to: P.O. Box 503, RPO West Beaver Creek, Richmond Hill, ON L4B 4R6 Canada Email: popphoto@neodata.com.

## SPEAKING OF PHOTOGRAPHY

COMPILED BY MATTHEW HOLDEN LEWIS

# QUOTES

"The more you look at the same exact thing, the more the meaning goes away, and the better and emptier you feel."

ANDY WARHOL

"Thinking should be done beforehand and afterwards—never while actually taking a photograph. Success depends on the extent of one's general culture, on one's set of values, one's clarity of mind and vivacity."

HENRI CARTIER-BRESSON

"When I have had such men before my camera my whole soul has endeavored to do its duty towards them in recording faithfully the greatness of the inner as well as the features of the outer man... The photograph thus taken has been almost the embodiment of a prayer."

JULIA MARGARET CAMERON


## ATTENTION ALL MAGAZINE RETAILERS

Hachette Filipacchi Media U.S. offers Retail Display Allowance to all retailers. Display allowance will be paid upon fulfillment of the terms and conditions of the formal agreement, which will be sent to you upon request. To obtain full details and a copy of the formal agreement, please write to the *Consumer Marketing Department—Attention: Director of Newsstand Sales, Hachette Filipacchi Media U.S., 1633 Broadway, 43rd Floor, New York, NY 10019.* The plan will become effective with all issues of Popular Photography delivered to you subsequent to the date your formal Retail Display Agreement is received and accepted by us.



THE ULTIMATE IN PHOTO SHOPPING:
www.adorama.com

FREE Shipping ON THOUSANDS OF PRODUCTS SEE OUR WEB SITE

CASES

Joe Farace Reporter Backpack II

NEW! Larger Size

GBR $79.95

Has a camera cradle that will hold a digital pro camera with a 100-400 lens, 9 repositionable dividers to hold several lenses, a flash and lots more.

**Separate compartment holds a 17" laptop (G5).**

Made of weather resistant, black, Softex nylon. 19.5" x 13" x 9.8"

Accepts All Slinger USA attachment accessories.

Mary Farace Daypack Backpack

Has a camera cradle that hold a compact digital camera with a 100-200mm lens attached and 9 dividers that holds everything you'll need for a day trip of shooting. Made of weather resistant, black, Softex nylon. Compact design 14" x 12" x 6". Accepts All Slinger USA attachment acc.

GBDPBK $54.95

SHOULDER BAG

GBSLSM $69.95

Features:

- Pockets Galore
- Removable insert provides protection for a midi digital/SLR camera, point-and-shoot camera, or mini DV camcorder and separates your photographic gear from your personal items.
- Special connecting loops on the sides of the bag to tie additional gear to the exterior of the bag.
- Roll-away, zipper-sealed flap for ultimate protection.
- Positive closure latches to keep your gear secure.

BINOCULARS

EL Series SWAROVSKI OPTIK

10 x 42 EL, Water Proof Roof Prism Binocular with 6.3 Degree Angle of View, Green, U.S.A. Limited Lifetime Warranty

BR Ultravid Leica

Water Proof Wide Angle Roof Prism Binocular with 6.6 Degree Angle of View, Black, U.S.A.

CARSON

We Stock The Full Line

Monarch Nikon

8 x 42 Monarch, Water Proof & Rubber Armored Roof Prism Binocular with 6.3 Degree Angle of View, U.S.A.

Yardage Pro Bushnell

7 x 26 Pinseeker 1500 Laser Rangefinder with Slope Feature, for Golf, 1,500 Yard Range.

FL Victory ZEISS

10 x 42 T* FL Victory, Water Proof Abbe-Koenig Roof Prism Binocular with 6.3 Degree Angle of View, U.S.A.

VANGUARD WINCHESTER PENTAX LEUPOLD PREMIER SELECT CELESTRON DEALER

Canon FUJINON MEADE MINOX SWIFT STEINER GERMANY tasco

PERSONAL PLANETARIUM

PREMIER SELECT CELESTRON DEALER SKYSCOUT

CNSS

Introducing the SkyScout from Celestron: The SkyScout is a revolutionary, one of a kind, patented handheld device that instantly identifies and/or locates any celestial object visible to the naked eye, providing educational and entertaining information, both in text and audio.

A fun learning tool for all ages, the SkyScout personal planetarium puts the knowledge of an expert astronomer in the palm of your hand.

*Item Includes: Carry Case, Earphones, Hand Strap, USB Cable*

SPOTTING SCOPES

DIGI SCOPING SWAROVSKI OPTIK

Leica

SPOTTING SCOPES

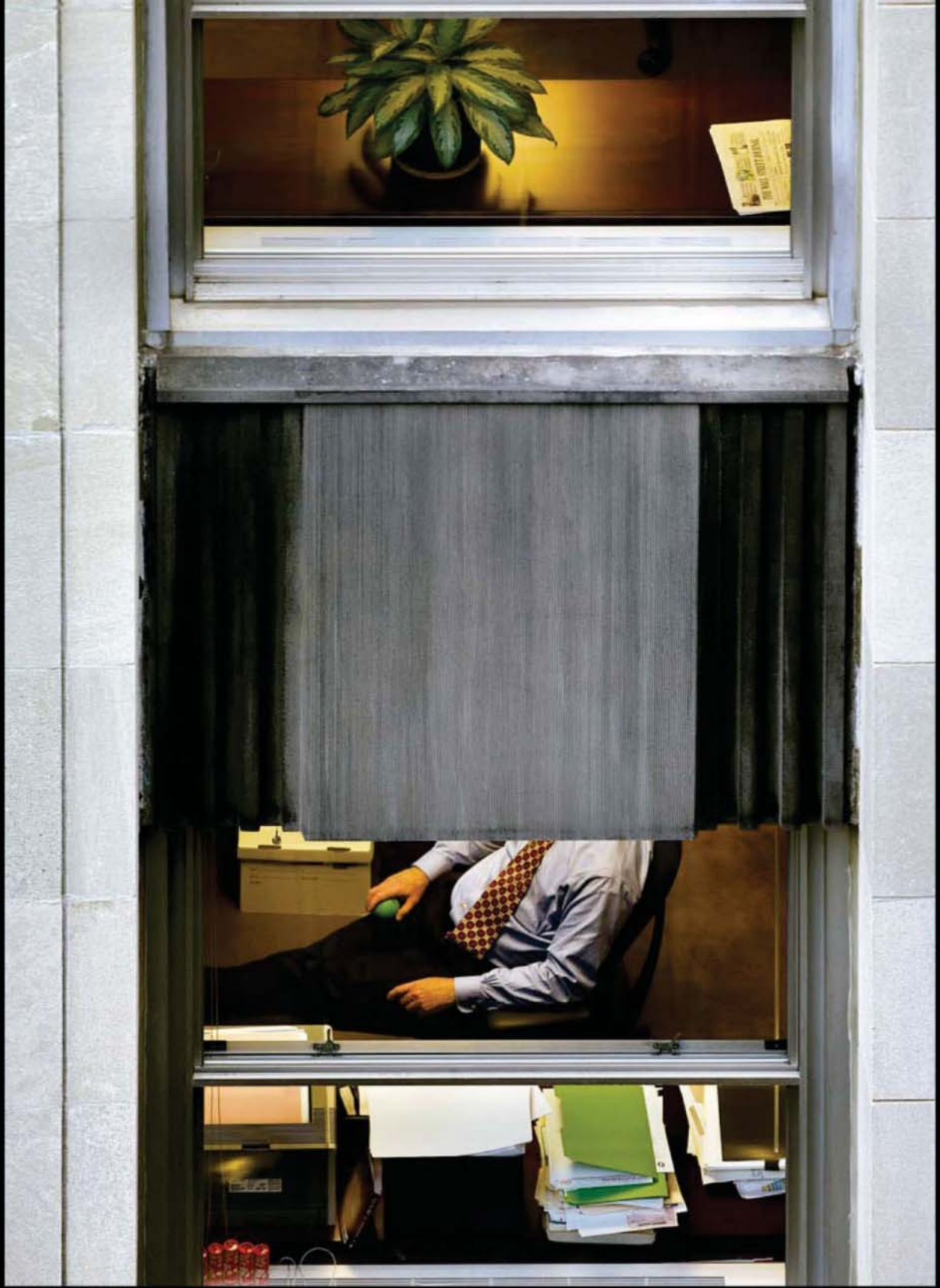
Nikon PREMIER

ZEISS

42 West 18th Street New York, N.Y. 10011
www.adorama.com • 800.223.2500

ADORAMA INC.
Source for the Educated Photographer

# MICHAEL WOLF: FROM *THE TRANSPARENT CITY*



**"Gaining access to the rooftops was a major hurdle in realizing this project—since 9/11, security is tight everywhere. Imagine me with my camera and big lens on a tripod at dusk, silhouetted up on a rooftop—I looked like a sniper. What made it possible was my artist-in-residency with U.S. Equities Realty. I went to Flickr for pictures of Chicago and drew red arrows on every rooftop that looked promising. These people knew exactly what each building was called and arranged access for me. One idea behind this was a fascination with Edward Hopper, looking through windows at people going on with banal actions. At dusk, when all of the windows in a building are lit up, there's lots of simultaneous action—it's a little voyeuristic. I used a medium-format camera with a digital back and a 300mm lens, with most exposures between 15 seconds and 1 minute 20 seconds."**

MICHAEL WOLF, *THE TRANSPARENT CITY* (APERTURE/MUSEUM OF CONTEMPORARY PHOTOGRAPHY, 2008)

# Capture the action in HD.

With the new Everio HD40, you can record all of life's twists and turns in stunning 1920x1080 Full HD with 60p digital output. Choose your best case scenario for shooting thanks to an AVCHD & MPEG-2 Dual format and 50 hours of Full HD recording time. Add x.v. Color for an expanded palette and Full HD digital still snapshots and you're always in the driver's seat.

HD Everio

camcorder.jvc.com

JVC
The Perfect Experience

**LENSBABY™** creates instruments designed to bend the rules back in your favor. Instruments like our new **COMPOSER™** selective focus lens that offers artists a whole new level of precision and ease of use—even with one hand. **SEE IN A NEW WAY.**

**www.lensbaby.com**